



California Regional Water Quality Control Board



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Arnold Schwarzenegger
Governor

ORDER NO. R2-2007-XXXX
NPDES PERMIT NO. CAG982001

GENERAL WASTE DISCHARGE REQUIREMENTS FOR
Discharges from Aggregate Mining, Sand Washing,
and Sand Offloading Facilities to Surface Waters

Table 1. Administrative Information

This Order was adopted by the Regional Water Board on:	XXXX, 2007
This Order shall become effective on:	January 1, 2008
This Order shall expire on:	December 31, 2012

The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified the discharges under this General National Pollutant Discharge Elimination System (NPDES) Permit as minor discharges based on the discharge's impacts to receiving water bodies.

To obtain coverage under this general permit, Dischargers must submit a Notice of Intent (NOI) Form as described in Attachments B and C and a filing fee equivalent to the first year's annual fee. If the NOI is complete, authorization to initiate discharge will be issued by the Regional Water Board Executive Officer.

Authorized Dischargers who need to continue discharging after the expiration date of this Order shall file a completed NOI form no later than 180 days in advance of this Order's expiration date. For Dischargers that meet criteria for coverage under the General Permit and that have submitted an NOI, which is deemed complete by the Executive Officer before the stated deadline, the terms and conditions of the Order will automatically continue after its expiration date. The terms and conditions of the General Permit will remain in effect until a new Order is adopted by the Regional Water Board. Such Dischargers for which coverage is extended will become subject to the new Order upon authorization by the Executive Officer.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on XXXX, 2007.

Bruce H. Wolfe, Executive Officer

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I. FACILITY INFORMATION

1. This National Pollutant Discharge Elimination System (NPDES) General Permit regulates discharges from aggregate mining, sand washing, and sand offloading facilities. This General Permit covers the following discharges:
 - a. Effluent from wastewater treatment facilities, such as settling ponds, sand and gravel filter systems, etc.,
 - b. Storm water runoff from aggregate mining, sand washing, and sand dredging facilities commingled with other wastewater from the facilities,
 - c. Water used for sand screening and washing, and
 - d. Bay water discharge or return flow during hydraulic sand offloading and reclamation (where no sand-washing is practiced).

These discharges are described in detail under Findings in Section II below.

2. This General Permit does **not** cover:
 - a. Discharges to a sanitary sewer system,
 - b. Sewage generated at the facility,
 - c. Any discharge that is already covered under an individual NPDES permit or Waste Discharge Requirements (WDRs), or
 - d. Storm water discharge that is not commingled with other wastewaters from aggregate mining, sand washing, and sand offloading facilities.
3. **Relationship of General Permit and Individual Permit.** Although a discharge may be eligible for coverage under this General Permit, the Regional Water Board may determine that the discharge would be better regulated under an individual NPDES permit, under another general NPDES permit, or under Waste Discharge Requirements (WDRs) for discharges to land. If an individual or general permit is issued or if WDRs are issued for a discharge, then the applicability of this General Permit to this discharge is immediately terminated on the effective date of the individual permit or WDRs.

II. FINDINGS

A. General Description of the Facilities

1. **Aggregate mining facilities.** These facilities are generally aggregate mining and processing facilities, which produce various grades of aggregates for construction uses. Some aggregate mining facilities have a ready-mix concrete plant and/or an asphalt plant on the same property. Most facilities have oil, grease, fuel and other chemical storage as part of a maintenance shop to provide maintenance for the

equipment used in aggregate mining and aggregate transportation. Aggregate mining results in a pit in the ground. Inactive mining pits are used as water detention ponds. Groundwater seeping into the active mining pit is pumped to a series of detention ponds. The water from the last detention pond is used for aggregate washing and dust control at the facility. Some facilities have on-site wells to supply additional water for aggregate washing. All wash water flows to detention ponds before discharge.

2. **Marine Sand washing facilities.** Sand dredged from various locations in San Francisco Bay is transported by barges and offloaded by conveyor belt to these facilities. Wet sand is stockpiled at the facility on the ground or stored in settling ponds. The majority of reclaimed sand is screened and sold for construction uses. A small amount of sand is washed (to remove salt) for use in concrete production. Most of the facilities have oil, grease, fuel and other chemical storage as part of a maintenance shop/shed to provide maintenance for on-site equipment.
3. **Sand offloading facilities.** These facilities have similar operations as those marine sand washing facilities described in Finding A.2 above, except the sand is offloaded by hydraulic slurry, and no sand washing is involved.
4. **Existing facilities and new facilities.** An existing facility is a facility that is covered under Order No. R2-2002-0063 or that holds an individual NPDES permit for its discharge. A new facility is a facility that is still under construction or that has completed its construction but has not commenced discharge to State waters.

B. General Description of the Discharges

1. **Discharge from aggregate mining facilities.** The wastewater at the facilities, such as water from the mining pit, storm water runoff from the facility yard, aggregate wash water, and runoff from dust control spray, flow into a series of detention ponds.

Pollutants in the discharge from aggregate mining facilities consist mainly of solids that are not settled out in the detention ponds and dissolved solids, which come from groundwater. The discharge may include toxic pollutants from the groundwater, or the storm water runoff from the facility (e.g., toxic materials not properly stored at the facility).

2. **Discharge from sand washing facilities.** Discharges from sand washing facilities normally consist of a combination of bay water that has drained from the sand piles during drying (or bay water that overflows from sand settling ponds if hydraulic dredging is used), water used for sand washing and screening, and storm water runoff from the facility yard. Potable water from a municipal source or from local wells is normally used to wash the sand. Water from municipal sources normally contains chlorine residual. This Order requires sand washing facilities that use municipal water supply as wash water to monitor chlorine residual in the discharge. Zinc phosphate is used in some water systems as a corrosion-protecting agent, and copper is used to control algae. Copper and galvanized steel are also widely used

for water supply pipes. Therefore, copper and zinc may be present in the sand wash water.

3. **Discharge from sand offloading facilities.** Discharges from sand offloading facilities normally consist of bay water that has drained from the sand piles during drying, or bay water that overflows from sand settling ponds if hydraulic dredging is used, and storm water runoff from the facility yard.

C. Legal Authorities. This Order is issued pursuant to CWA Section 402 and implementing regulations adopted by the USEPA and CWC Chapter 5.5, Division 7. It shall serve as an NPDES permit for point source discharges from the facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to CWC Article 4, Chapter 4 for discharges that are not subject to regulation under CWA Section 402.

States may request authority from USEPA to issue general NPDES permits pursuant to Title 40, Code of Federal Regulations (CFR), Part 122.28. On June 8, 1989, the State Water Resources Control Board (the State Board) submitted an application to the U.S. Environmental Protection Agency (USEPA) requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Board's request and granted authorization for the State to issue general NPDES permits.

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of Notice of Intent (NOI) submitted by dischargers, through monitoring and reporting programs, and through special studies. **Attachments A through G**, which contain background information and rationale for the requirements of the Order, are hereby incorporated into this Order and, thus, constitute part of the findings for this Order.

E. Notice of Intent (NOI). The Discharger who wishes to be covered under this General Permit must submit an NOI (see **Attachments B and C**). Specific facility information for each discharge shall be included on the NOI Form submitted for that discharge.

Any Discharger proposing similar discharges at multiple sites may be covered under one discharge authorization letter subject to the approval of the Executive Officer on a case-by-case basis. Each outfall will be subject to individual fees.

Attachment B to this Order is the Notice of Intent (NOI) form; **Attachment C** contains the instructions for filling out the NOI form.

F. Notice of General Permit Coverage (NGPC)—Discharge Authorization. Regional Water Board staff will review the NOI and notify the Discharger or its duly authorized representative if the NOI is complete or incomplete, and whether the proposed activity or discharge can be covered under this General Permit. After receipt of a complete NOI, the Executive Officer will issue a Notice of General Permit Coverage (NGPC). Coverage under this General Permit starts from the date of the NGPC.

G. California Environmental Quality Act (CEQA). This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with CWC Section 13389.

H. Technology-Based Effluent Limitations. NPDES regulations at 40 CFR 122.44(a) require permits to include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations, which are based on:

- San Francisco Bay Region Basin Plan (see II.J below), Table 4-2, effluent limits for all treatment facilities,
- Best professional judgment (BPJ) pursuant to CWA Section 402(a)(1)(B) and NPDES regulations at 40 CFR 125.3.

A detailed discussion of the technology-based effluent limitations is included in the Fact Sheet (**Attachment F**).

I. Water Quality-Based Effluent Limitations. 40 CFR Section 122.44(d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). This Order does not include WQBELs for toxic pollutants. Instead, there are trigger concentrations that will trigger accelerated monitoring, additional investigation, and pollutant control.

J. Water Quality Control Plan. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the USEPA, where required.

The Basin Plan in Chapter 2 states that the beneficial uses of any specifically identified water body generally apply to its tributaries (Tributary Rule). The potential and existing beneficial uses supported by the water bodies in this region include municipal and domestic supply (MUN), agricultural supply (AGR), industrial process supply (PRO), groundwater recharge (GWR), water contact recreation (REC1), non-contact water recreation (REC2), wildlife habitat (WILD), cold freshwater habitat (COLD), warm freshwater habitat (WARM), fish migration (MIGR), fish spawning (SPWN), estuarine habitat (EST), industrial service supply (IND), navigation (NAV), marine habitat (MAR), shellfish harvesting (SHELL), ocean, commercial and sport fishing (COMM), and

preservation of rare and endangered species (RARE). In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

Requirements of this Order implement the Basin Plan.

- K. Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan.
- L. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that applied in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- M. State Implementation Policy (SIP).** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The State Water Board subsequently amended the SIP on February 24, 2005, and the amendments became effective on July 31, 2005. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so. Requirements of this Order implement the SIP.
- N. Compliance Schedules and Interim Requirements.** This Order does not include compliance schedules or interim effluent limitations.
- O. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21; 65 Fed. Reg. 24641; (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

- P. Antidegradation Policy.** Section 131.12 of 40 CFR requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet (**Attachment F**), the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- Q. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in detail in the Fact Sheet (**Attachment F**), the prohibitions, limitations, and conditions of this Order are consistent with applicable federal and State anti-backsliding requirements.
- R. Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E. The MRP may be amended by the Executive Officer pursuant to USEPA regulation 40 CFR 122.62, 122.63, and 124.5.
- S. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger (**Attachment G**). A rationale for the special provisions contained in this Order is provided in the Fact Sheet (**Attachment F**).
- T. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections VI.C. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- U. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (**Attachment F**).

V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (**Attachment F**) of this Order.

W. Storm Water Not Commingled with Wastewater. Clean Water Act § 402(p) and the regulations promulgated thereunder require industrial storm water dischargers to obtain an NPDES permit for discharging storm water from the facility to state water and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial storm water discharges. The State Water Resources Control Board (State Board) developed a statewide NPDES General Permit for storm water discharges associated with industrial activities (NPDES General Permit CAS000001). Storm water discharges that are not commingled with other wastewaters from aggregate mining and sand washing/offloading facilities should be regulated under the State Board General Permit. Storm water discharges that commingle with process wastewaters from the aggregate mining and sand washing/offloading facilities are regulated under this General Permit.

X. Best Management Practices (BMPs) Plan. This Order requires a Discharger with an existing facility (or existing Discharger) to submit a Best Management Practices (BMPs) plan with the Notice of Intent (NOI), if it has not done so under the requirement of Order No. R2-2002-0063, to obtain coverage under this General Permit. However, a Discharger with a new facility (new Discharger) has the option of submitting its BMPs plan 30 days prior to its operation or commencement of discharge. This is to allow the new Discharger to develop a BMPs plan that is specific to its operation and to better identify which areas of the facility operation need improved BMPs. This Order also requires all Dischargers to update the BMPs Plan annually, and implement a BMPs plan for their industrial activity. The purpose of the BMPs plan is to control and abate the discharge of pollutants from the facility to surface waters and to achieve compliance with Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) requirement and with applicable water quality standards.

IT IS HEREBY ORDERED, that Order No. R2-2002-0063 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, the Dischargers shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

1. Discharge of effluent or treated wastewater at a location or in a manner different from that described in the Notice of Intent, and allowed by the Notice of Permit Coverage, is prohibited.
2. The discharge shall not contain silt, sand, clay or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discolorations in surface waters or to unreasonably affect or threaten to affect beneficial uses.

3. The discharge shall not contain floating debris, oil, grease, scum, or other floating materials.
4. On-site storage of oil, fuel and any other chemicals shall be within secondary containment or under a roof.
5. Bypassing retention ponds is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations for Aggregate Mining Facilities

The effluent from each discharge outfall(s) as defined in the Notice of Intent shall not exceed the following effluent limits in Table 1:

Table 1. Effluent Limitations for Aggregate Mining Facilities

Constituents	Units	Daily Maximum	Weekly Average	Monthly Average	Instantaneous Maximum	Instantaneous Minimum
1. Total Suspended Solids (TSS)	mg/L	--	45	30	--	--
2. Turbidity	NTU	40	--	--	--	--
3. Settable Matter	mL/1-hr	0.2	--	0.1	--	--
4. pH ⁽¹⁾	standard units	--	--	--	8.5	6.5
5. Chlorine residual ⁽²⁾	mg/L	--	--	--	0.0	--
6. Acute Toxicity ⁽³⁾	%survival	The survival of bioassay test organism(s) in 96-hour bioassays of undiluted effluent in a single-sample maximum shall be at least 70 %. A bioassay test showing survival of less than 70% represents a violation of this effluent limit.				

Footnotes for Table 1:

- (1) Exceedance of the pH limit will not constitute a violation of this Order if the Discharger can demonstrate, through receiving water monitoring, that the discharge does not cause a natural background pH to be depressed below 6.5 nor raised above 8.5, or if outside this range, the receiving water has not been altered from normal ambient pH by more than 0.5 Standard Units.
- (2) The chlorine residual limit applies only to sand washing facilities that use municipal water supply as wash water.
- (3) Compliance with the acute toxicity limit shall be achieved in accordance with Section IV of the attached MRP (Attachment E).

B. Effluent Limitations for Marine Sand Washing Facilities

The effluent from each discharge outfall(s) as defined in the Notice of Intent shall not exceed the following limits:

Table 2. Effluent Limitations for Marine Sand Washing Facilities

Constituents	Units	Daily Maximum	Weekly Average	Monthly Average	Instantaneous Maximum	Instantaneous Minimum
1. Total Suspended Solids (TSS) ⁽¹⁾	mg/L	--	--	--	--	--
2. Turbidity	NTU	50	--	--	--	--
3. Settable Matter	mL/1-hr	0.2	--	0.1	--	--
4. pH ⁽²⁾	standard units	--	--	--	8.5	6.5
5. Chlorine residual ⁽³⁾	mg/L	--	--	--	0.0	--
6. Acute Toxicity ⁽⁴⁾	%survival	The survival of bioassay test organism(s) in 96-hour bioassays of undiluted effluent in a single-sample maximum shall be at least 70 %. A bioassay test showing survival of less than 70% represents a violation of this effluent limit.				

Footnotes for Table 2:

- (1) There are no TSS effluent limits for this category of discharges, due to the questionable reliability of the salt water TSS analytical method (see Fact Sheet IV.A.2.b(4) for more details). However, when this issue is resolved, this Order may be re-opened to include TSS effluent limitations for marine sand washing facilities.
- (2) Exceedance of the pH limit will not constitute a violation of this Order if the Discharger can demonstrate, through receiving water monitoring, that the discharge does not cause a natural background pH to be depressed below 6.5 nor raised above 8.5, or if outside this range, the receiving water has not been altered from normal ambient pH by more than 0.5 Standard Units.
- (3) Compliance with this limit shall be achieved in accordance with Section IV of the attached MRP (Attachment E).

C. Effluent Limitations for Sand Offloading Facilities

The effluent from each discharge outfall(s) as defined in the Notice of Intent shall not exceed the following limits:

Table 3. Effluent Limitations for Sand Offloading Facilities

Constituents	Daily Maximum	Instantaneous Maximum	Instantaneous Minimum
1. Settable Matter, mL/1-hr	1.0	--	--
2. pH, standard unit ⁽¹⁾	--	8.5	6.5

Footnotes for Table 3:

- (1) Exceedance of the pH limit will not constitute a violation of this Order if the Discharger can demonstrate, through receiving water monitoring, that the discharge does not cause a natural background pH to be depressed below 6.5 nor raised above 8.5, or if outside this range, the receiving water has not been altered from normal ambient pH by more than 0.5 Standard Units.

D. Land Discharge Specifications

Not applicable.

E. Reclamation Specifications

Not applicable.

F. Storm Water Limitations

Not applicable.

V. RECEIVING WATER LIMITATIONS**A. Surface Water Limitations**

1. The discharge shall not cause the following conditions to exist at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam in concentrations that cause nuisance or adversely affect beneficial uses;
 - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
 - c. Alterations of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; and
 - e. Toxic or other deleterious substances to be present in concentrations or quantities that can cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or that can render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge shall not cause nuisance or adversely affect the beneficial uses of the receiving water.
3. The discharge shall not cause the following limits to be exceeded in waters of the State at any one place within one foot of the water surface:
 - a. Dissolved Oxygen:
 - (1) For all tidal waters, the following objectives shall apply:

In the Bay:

i. Downstream of Carquinez Bridge	5.0 mg/L minimum
ii. Upstream of Carquinez Bridge	7.0 mg/L minimum

(2) For nontidal waters, the following objectives shall apply:

Waters designated as:

- | | |
|------------------------|------------------|
| i. Cold water habitat | 7.0 mg/L minimum |
| ii. Warm water habitat | 5.0 mg/L minimum |

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharges shall not cause further reduction in ambient dissolved oxygen concentrations.

- | | |
|--|--|
| b. Dissolved Sulfide: | Natural background levels |
| c. pH: | The pH shall not be depressed below 6.5 nor raised above 8.5, or if outside this range, the receiving water has not been altered from normal ambient pH by more than 0.5 Standard Units. |
| d. Total Dissolved Solids (TDS) and Chlorides: | |

(1) For discharges to Alameda Creek above Niles:

- | | |
|------------|--|
| TDS: | 250 mg/L (90-day arithmetic mean)
360 mg/L (90-day 90 th percentile)
500 mg/L (daily maximum) |
| Chlorides: | 60 mg/L (90-day arithmetic mean)
100 mg/L (90-day 90 th percentile)
250 mg/L (daily maximum) |

(2) For discharges to other fresh water bodies supporting municipal water supply or ground water recharge:

- | | |
|------------|--------------------------|
| TDS: | 500 mg/L (daily maximum) |
| Chlorides: | 250 mg/L (daily maximum) |

4. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

B. Groundwater Limitations

Not applicable.

VI. PROVISIONS**A. Federal Standard Provisions**

The Discharger shall comply with all Standard Provisions included in **Attachment D** of this Order.

B. Monitoring and Reporting Program Requirements

1. The Discharger shall comply with the Monitoring and Reporting Program (MRP) and future revisions thereto, in **Attachment E** of this Order and as specified in the Notice of General Permit Coverage (NGPC).
2. The Discharger authorized under this permit may be required to comply with additional monitoring requirements. The Executive Officer will specify such additional monitoring requirements in the authorization letter, which will include an explanation of the need for the information. Examples of additional monitoring that could be required are listed below:
 - a. Monitoring required to respond to a complaint received about a facility authorized to discharge under this permit,
 - b. Dioxins and furans monitoring,
 - c. Participation in the Regional Monitoring Program (RMP),
 - d. Additional effluent and ambient priority pollutant monitoring.

C. Special Provisions**1. Reopener Provisions**

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law:

- a. If present or future investigations demonstrate that the discharge(s) governed by this Order will or have a reasonable potential to cause or contribute to, or will cease to, have adverse impacts on water quality and/or beneficial uses of the receiving waters;
- b. If new or revised WQOs or TMDLs come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations or triggers for toxic pollutants in this Order will be modified as necessary to reflect updated WQOs and wasteload

- allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs, TMDLs, or as otherwise permitted under Federal regulations governing NPDES permit modifications;
- c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified;
 - d. If an administrative or judicial decision on a separate NPDES permit or WDR addresses requirements similar to this discharge;
 - e. Or as otherwise authorized by law.

The Dischargers may request permit modification based on the above. The Dischargers shall include in any such request an antidegradation and antibacksliding analysis.

2. Notice of Intent (NOI)

A person who seeks coverage under this General Permit shall file a complete NOI. The NOI application for each point of proposed discharge to a surface water body shall contain the information required in the NOI Form, as explained in **Attachments B and C** of this Order and as may be amended by the Executive Officer.

3. NOI Review

Upon receipt of an NOI application package for proposed discharge, the Regional Water Board staff will review the application to determine if it is complete and propose to the Executive Officer whether the Discharger is eligible to discharge waste under this general permit. The application package shall document that the facility and associated operation, maintenance, and monitoring plans are capable of ensuring that the discharge will meet the provisions, prohibitions, effluent limitations, and receiving water limitations of this Order.

4. Notice of General Permit Coverage (NGPC) – Discharge Authorization

If the Executive Officer determines that the proposed discharge is eligible for this general permit and its NOI is complete, the Executive Officer will authorize the proposed discharge by issuing a NGPC. The Discharger is authorized to discharge starting on the effective date of the NGPC. The NGPC will specify type(s) of wastewater and the maximum discharge flow rate allowed. Any Discharger proposing similar discharges at multiple sites may be covered under one discharge authorization letter subject to the approval of the Executive Officer on a case-by-case basis. Each outfall will be subject to individual fees.

5. Discharge Termination

In accordance with 40 CFR 122.28(b)(2)(iv), the Executive Officer may terminate or revoke coverage under this Order for any of the specified causes for an individual permit coverage set forth in 40 CFR 122.28(b)(3). After notice and opportunity for a hearing, coverage of an individual discharge under this General Permit may be terminated or modified for cause, including but not limited to, the following:

- a. Violation of any term or condition of this General Permit;
- b. Misrepresentation or failure to disclose all relevant facts in obtaining coverage under this General Permit; or
- c. Change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

6. Non-Compliance as a Violation

Upon the effective date of the Executive Officer's discharge authorization, the Discharger shall comply with all applicable conditions and limitations of this Order and its Attachments. Any permit noncompliance (violations of requirements in this Order or Monitoring Program) constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action, permit or authorization termination, revocation and reissuance, modification, issuance of an individual permit, or denial of a renewal application.

7. Individual NPDES Permit May Be Required

The USEPA Administrator may request the Executive Officer to require any discharger authorized to discharge waste by a general permit to subsequently apply for and obtain an individual NPDES permit. The Executive Officer may require any discharger authorized to discharge waste by a general permit to subsequently apply for and obtain an individual NPDES permit. An interested person may petition the Executive Officer or the Regional Administrator to take action under this provision. Cases where an individual NPDES permit may be required include the following:

- a. The Discharger is not in compliance with the conditions of this Order or as authorized by the Executive Officer,
- b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source,
- c. Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit,
- d. A water quality control plan containing requirements applicable to such point sources is approved, or

- e. The requirements of 40 CFR 122.28(a), as explained in Finding II.C, are not met.

8. Triggers for Accelerated Monitoring and Additional Investigation

Four types of triggers for toxic pollutants are listed in Table 4 below. They are not effluent limitations and should not be construed as such. Instead, they are levels at which additional investigation is warranted to determine whether a numeric limit for a particular constituent is necessary. The Type I triggers in Table 4 are intended for use where discharges are to a fresh water body supporting municipal water supply or groundwater recharge beneficial use. Type II triggers are intended for use where discharges are to other fresh water bodies that do not have municipal water supply or groundwater recharge beneficial use designation. Type III triggers in Table 4 are intended for use where discharges are to a water body that is estuarine. Type IV triggers are for discharges into a marine environment. The authorization issued to each Discharger will indicate which trigger type is applicable to that specific discharge.

If any constituent in an effluent exceeds the corresponding trigger as listed in Table 4, the Discharger shall take three monthly samples (three influent, if applicable, and three effluent) for each exceeded constituent following the exceedance. If confirmed, the Discharger shall comply with Provisions IV.C.8.a and IV.C.8.b, below. If the exceedance is caused solely by the limitations of treatment capability, and the Discharger has performed accelerated monitoring in the past for the same pollutants and is in the process of evaluating alternatives or installing new treatment units to address the noncompliance, the Discharger shall be exempted from the accelerated monitoring and requirements in a. and b. below. However, the Discharger shall report the exceedance according to Provision VI.A.2.c and indicate the past and on-going efforts in the written notification.

- a. Within 90 days of confirmation (through accelerated monitoring, that effluent concentrations of a pollutant exceed one or more of the above triggers, the Discharger shall submit a Feasibility Analysis to the Regional Water Board that describes if methods to control levels of pollutant(s) of concern are feasible, and if so, describes the selected methods of control to ensure that levels of pollutant(s) of concern in effluent will not be discharged at levels exceeding applicable water quality objectives.
- b. If there is no feasible control method, the Discharger's Feasibility Study shall document the possibility of relocating the discharge to land, or to a sanitary sewer system.
- c. Based on the results of the above evaluations, the Executive Officer may terminate the discharge and/or require application for an individual NPDES permit consistent with Provisions IV.C.5 and VI.C.7 above.

Table 4. Trigger Concentrations for Toxic Pollutants

# in CTR	PRIORITY POLLUTANTS	Type I Triggers	Type II Triggers	Type III Triggers	Type IV Triggers
		For discharges to fresh water bodies supporting MUN or GWR (ug/L)	For discharges to fresh water bodies not supporting MUN or GWR (ug/L)	For discharges to estuarine water bodies (ug/L)	For discharges to marine water bodies (ug/L)
1	Antimony	14	4300	4300	4300
2	Arsenic	150	150	36	36
4	Cadmium	1.8	1.8	3.4	9.4
5a	Chromium (III)	340	340	640	---
5b	Chromium (VI)	11	11	11	50
6	Copper	15	15	4.2	4.2
7	Lead	6.7	6.7	8.5	8.5
8	Mercury	0.025	0.025	0.025	0.025
9	Nickel	86	86	13	13
10	Selenium	5	5	5	5
11	Silver	11	11	2.2	2.2
12	Thallium	1.7	1.7	6.3	6.3
13	Zinc	200	200	86	86
14	Cyanide	5.2	5.2	1	1
15	Asbestos (fibers/L)	7000000	---	---	---
16	2,3,7,8-TCDD	0.000000013	0.000000014	0.000000014	0.000000014
	TCDD TEQ	0.000000013	0.000000014	0.000000014	0.000000014
17	Acrolein	320	780	780	780
18	Acrylonitrile	0.06	0.66	0.66	0.66
19	Benzene	1.2	71	71	71
20	Bromoform	4.3	360	360	360
21	Carbon Tetrachloride	0.3	4.4	4.4	4.4
22	Chlorobenzene	680	21,000	21,000	21,000
23	Chlordibromomethane	0.41	34	34	34
27	Dichlorobromomethane	0.56	46	46	46
29	1,2-Dichloroethane	0.38	99	99	99
30	1,1-Dichloroethylene	0.057	3.2	3.2	3.2
31	1,2-Dichloropropane	0.52	39	39	39
32	1,3-Dichloropropylene	10	1,700	1,700	1,700
33	Ethylbenzene	3,100	29,000	29,000	29,000
34	Methyl Bromide	48	4,000	4,000	4,000
36	Methylene Chloride	4.7	1,600.0	1600	1600
37	1,1,2,2-Tetrachloroethane	0.17	11.00	11	11
38	Tetrachloroethylene	0.8	8.85	8.85	8.85
39	Toluene	6,800	200,000	200,000	200,000
40	1,2-Trans-Dichloroethylene	700	140,000	140,000	140,000
42	1,1,2-Trichloroethane	0.6	42	42	42
43	Trichloroethylene	2.7	81	81	81
44	Vinyl Chloride	2.0	525	525	525
45	Chlorophenol	120	400	400	400
46	2,4-Dichlorophenol	93	790	790	790
47	2,4-Dimethylphenol	540	2,300	2,300	2,300
48	2-Methyl-4,6-Dinitrophenol	13	765	765	765

# in CTR	PRIORITY POLLUTANTS	Type I Triggers	Type II Triggers	Type III Triggers	Type IV Triggers
		For discharges to fresh water bodies supporting MUN or GWR (ug/L)	For discharges to fresh water bodies not supporting MUN or GWR (ug/L)	For discharges to estuarine water bodies (ug/L)	For discharges to marine water bodies (ug/L)
49	2,4-Dinitrophenol	70	14,000	14,000	14,000
53	Pentachlorophenol	0.28	8.2	7.9	7.9
54	Phenol	21,000	4600,000	4600,000	4600,000
55	2,4,6-Trichlorophenol	2.1	6.5	6.5	6.5
56	Acenaphthene	1,200	2,700	2,700	2,700
58	Anthracene	9,600	110,000	110,000	110,000
59	Benzidine	0.00012	0.00054	0.00054	0.00054
60	Benzo(a)Anthracene	0.0044	0.049	0.049	0.049
61	Benzo(a)Pyrene	0.0044	0.049	0.049	0.049
62	Benzo(b)Fluoranthene	0.0044	0.049	0.049	0.049
64	Benzo(k)Fluoranthene	0.0044	0.049	0.049	0.049
66	Bis(2-Chloroethyl)Ether	0.031	1.4	1.4	1.4
67	Bis(2-Chloroisopropyl)Ether	1,400	170,000	170,000	170,000
68	Bis(2-Ethylhexyl)Phthalate	1.8	5.9	5.9	5.9
70	Butylbenzyl Phthalate	3,000	5,200	5,200	5,200
71	2-Chloronaphthalene	1,700	4,300	4,300	4,300
73	Chrysene	0.0044	0.049	0.049	0.049
74	Dibenzo(a,h)Anthracene	0.0044	0.049	0.049	0.049
75	1,2-Dichlorobenzene	2,700	17,000	17,000	17,000
76	1,3-Dichlorobenzene	400	2,600	2,600	2,600
77	1,4-Dichlorobenzene	400	2,600	2,600	2,600
78	3,3'-Dichlorobenzidine	0.040	0.077	0.077	0.077
79	Diethyl Phthalate	23,000	120,000	120,000	120,000
80	Dimethyl Phthalate	313,000	2,900,000	2,900,000	2,900,000
81	Di-n-Butyl Phthalate	2,700	12,000	12,000	12,000
82	2,4-Dinitrotoluene	0.11	9.1	9.1	9.1
85	1,2-Diphenylhydrazine	0.04	0.54	0.54	0.54
86	Fluoranthene	300	370	370	370
87	Fluorene	1,300	14,000	14,000	14,000
88	Hexachlorobenzene	0.00075	0.00077	0.00077	0.00077
89	Hexachlorobutadiene	0.44	50	50	50
90	Hexachlorocyclopentadiene	240	17,000	17,000	17,000
91	Hexachloroethane	1.9	8.9	8.9	8.9
92	Indeno(1,2,3-cd) Pyrene	0.0044	0.049	0.049	0.049
93	Isophorone	8.4	600	600	600
95	Nitrobenzene	17	1,900	1,900	1,900
96	N-Nitrosodimethylamine	0.00069	8.1	8.1	8.1
97	N-Nitrosodi-n-Propylamine	0.005	1.4	1.4	1.4
98	N-Nitrosodiphenylamine	5	16	16	16
100	Pyrene	960	11,000	11,000	11,000
102	Aldrin	0.00013	0.00014	0.00014	0.00014
103	alpha-BHC	0.0039	0.013	0.013	0.013
104	beta-BHC	0.014	0.046	0.046	0.046
105	gamma-BHC	0.019	0.063	0.063	0.063

# in CTR	PRIORITY POLLUTANTS	Type I Triggers	Type II Triggers	Type III Triggers	Type IV Triggers
		For discharges to fresh water bodies supporting MUN or GWR (ug/L)	For discharges to fresh water bodies not supporting MUN or GWR (ug/L)	For discharges to estuarine water bodies (ug/L)	For discharges to marine water bodies (ug/L)
107	Chlordane	0.00057	0.00059	0.00059	0.00059
108	4,4-DDT	0.00059	0.00059	0.00059	0.00059
109	4,4-DDE	0.00059	0.00059	0.00059	0.00059
110	4,4-DDD	0.00083	0.00084	0.00084	0.00084
111	Dieldrin	0.00014	0.00014	0.00014	0.00014
112	alpha-Endosulfan	0.056	0.056	0.0087	0.0087
113	beta-Endosulfan	0.056	0.056	0.0087	0.0087
114	Endosulfan Sulfate	110	240	240	240
115	Endrin	0.036	0.036	0.0023	0.0023
116	Endrin Aldehyde	0.76	0.81	0.81	0.81
117	Heptachlor	0.00021	0.00021	0.00021	0.00021
118	Heptachlor Epoxide	0.0001	0.00011	0.00011	0.00011
119-125	PCBs sum	0.00017	0.00017	0.00017	0.00017
126	Toxaphene	0.0002	0.0002	0.0002	0.0002
	Tributyltin	0.072	0.072	0.0074	0.0074
	Total PAHs	--	--	15	15

Footnotes for Table 4:

MUN– municipal water supply

GWR- ground water recharge

9. Construction, Operation and Maintenance Specifications

a. Wastewater Facilities, Review and Evaluation, and Status Reports.

- (1) The Discharger shall operate and maintain its wastewater treatment facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable treatment and disposal of all wastewater produced.
- (2) The Discharger shall regularly review and evaluate its wastewater facilities and operation practices in accordance with section a.1 above. Reviews and evaluations shall be conducted as an ongoing component of the Discharger's administration of its wastewater facilities.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its wastewater facilities and operation practices, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures, and applicable wastewater facility programs or capital improvement projects.

b. Operations and Maintenance Manual (O&M), Review and Status Reports.

- (1) The Discharger shall maintain an O&M Manual as for the Discharger's wastewater facilities. The O&M Manual shall be maintained in usable condition and be available for reference and use by all applicable personnel.
- (2) The Discharger shall regularly review, revise, or update, as necessary, the O&M Manual(s) so that the document(s) may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary. For any significant changes in treatment facility equipment or operation practices, applicable revisions shall be completed within 90 days of completion of such changes.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its O&M manual, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures and applicable changes to its operations and maintenance manual.

10. Special Studies, Technical Reports and Additional Monitoring Requirements**a. Best Management Practices (BMPs) Plan**

- (1) **Existing Discharger.** The Discharger from an existing facility shall submit a BMPs plan together with the NOI.
- (2) **New Discharger.** The Discharger from a newly proposed facility has the option of submitting its BMPs plan with the NOI or 30 days before the commencement of its operations.
- (3) **BMPs plan requirements.** The BMPs plan shall address all specific means of controlling the discharge of pollutants from the facility. The contents of the BMPs plan is specified in the instructions for the NOI attached to this Order. The Discharger shall implement immediately the BMPs plan upon submittal to the Regional Water Board. The Executive Officer may require additional pollutant control measures. The Discharger shall review and update the effectiveness and adequacy of the implemented BMPs plan as often as necessary.
- (4) **Annual Report.** The Discharger shall submit updates to its BMPs plan annually to the Regional Water Board by July 1st of each year.

b. Facility Modification/Maintenance

The Discharger shall submit a schedule at least 30 days prior to any modification

or maintenance of the facility, which the Discharger determines may result in violation of effluent limitations or alteration of the outfall location(s). The schedule shall contain a description of the maintenance including the modified outfall location(s) and its purpose; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of non-compliance.

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP (Attachment E of this Order). For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n \quad \text{where: } \Sigma x \text{ is the sum of the measured ambient water concentrations, and } n \text{ is the number of samples.}$$

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Inland Surface Waters are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ) is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity.

The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

ATTACHMENT B – NOTICE OF INTENT (NOI) FORM

NOTICE OF INTENT (NOI) to comply with the terms of the region-wide General National Pollutant Discharge Elimination System (NPDES) Permit authorizing discharge from aggregate mining, sand washing, and sand offloading facilities to surface waters.

General Permit No. CAG 982001

Order No. R2-2007-XXXX

FOR REGIONAL WATER BOARD USE ONLY

WDID:	Date NOI Received:	Date NOI Processed:
Case Manager's Initials:	Fee Amount Received: \$	Check #:
Category of operations: <input type="checkbox"/> Aggregate mining <input type="checkbox"/> Marine sand washing <input type="checkbox"/> Sand offloading Applicable effluent limitations (Section IV): <input type="checkbox"/> Aggregate mining—Table 1 <input type="checkbox"/> Marine sand washing—Table 2 <input type="checkbox"/> Sand offloading—Table 3	Receiving water type (according to Provision VI.C.8): <input type="checkbox"/> Fresh water supporting MUN or GWR <input type="checkbox"/> Alameda Cr. above Niles <input type="checkbox"/> Other fresh water bodies <input type="checkbox"/> Other fresh water bodies <input type="checkbox"/> Estuarine <input type="checkbox"/> Marine	Applicable Triggers (Provision VI.C.8): <input type="checkbox"/> Table 4 Type I <input type="checkbox"/> Table 4 Type II <input type="checkbox"/> Table 4 Type III <input type="checkbox"/> Table 4 Type IV Applicable receiving water limitations (Section V, for DO and TDS/chloride only, all others apply): Dissolved oxygen <input type="checkbox"/> 5 mg/L <input type="checkbox"/> 7 mg/L TDS and chlorides <input type="checkbox"/> V.A.3.d.(1) <input type="checkbox"/> V.A.3.d.(2) <input type="checkbox"/> None

DISCHARGER TO PROVIDE THE FOLLOWING INFORMATION**I. OWNER/OPERATOR INFORMATION** (If additional owners/operators are involved, provide the information in a supplemental letter)

A. Facility/Agency Name		Owner/Operator Type (Check One) 1. <input type="checkbox"/> Public Agency 2. <input type="checkbox"/> Private 3. <input type="checkbox"/> Other, specify the type:	
Street Address			
City	State	Zip Code	Phone
B. Contact Person's Name & Title		1. <input type="checkbox"/> Owner 2. <input type="checkbox"/> Operator 3. <input type="checkbox"/> Owner/Operator	

☐ Additional owner information attached**II. BILLING ADDRESS**

Send to: <input type="checkbox"/> Owner/Operator <i>(Enter information at right <u>only</u> if it is different from above)</i> <input type="checkbox"/> Other <i>(Enter information at right)</i>	Name		
	Mailing Address		
	City	State	Zip Code

III. DISCHARGE EFFLUENT INFORMATION

1. Describe the proposed discharge(s). List any potential pollutants in the discharge. Attach additional sheets if needed.			
2. List types of discharge:			
<input type="checkbox"/> Settling pond overflow	<input type="checkbox"/> Storm water	<input type="checkbox"/> Bay water from sand pile	<input type="checkbox"/> Sand wash water, indicate the source of wash water:
<input type="checkbox"/> Others, please specify:			
3. Discharge flow rate: Average daily flow rate (gallons/day): _____ Maximum daily flow rate (gallons/day): _____			
4. Frequency of discharge: <input type="checkbox"/> Continuous <input type="checkbox"/> Daily <input type="checkbox"/> Intermittent <input type="checkbox"/> Emergency			

IV. DISCHARGE WATER QUALITY PARAMETERS

- The following data summary (statistics) must be based on monitoring data collected during the **past five years**. Provide a compilation of all monitoring data and laboratory data sheets upon request from Regional Water Board staff. Provide a separate data summary table for each discharge point.

Discharge Point 1 conventional and non-conventional pollutants:

Parameter	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
Turbidity (0.1 NTU)		NTU			
Total Suspended Solids		mg/L			
Settleable matter		ml/L-hr			
pH (0.1 standard units)		s.u.		Not applicable	
Dissolved Oxygen		mg/L			
Total Dissolved Solids		mg/L			
Chloride		mg/L			
Chlorine Residual		mg/L			
Oil and grease		mg/L			
Acute Toxicity		% survival			

Discharge point 1 priority pollutants:

CTR No.	Priority pollutants	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
1	Antimony		µg/L			
2	Arsenic		µg/L			
3	Beryllium		µg/L			
4	Cadmium		µg/L			
5a	Chromium (III)		µg/L			
5b	Chromium (VI)		µg/L			
6	Copper		µg/L			
7	Lead		µg/L			
8	Mercury		µg/L			
9	Nickel		µg/L			
10	Selenium		µg/L			
11	Silver		µg/L			
12	Thallium		µg/L			
13	Zinc		µg/L			
14	Cyanide		µg/L			
15	Asbestos		fibers/L			
16	2,3,7,8-TCDD (Dioxin)		µg/L			
16-TEQ	2,3,7,8-TCDD TEQ		µg/L			
17	Acrolein		µg/L			
18	Acrylonitrile		µg/L			
19	Benzene		µg/L			
20	Bromoform		µg/L			
21	Carbon Tetrachloride		µg/L			
22	Chlorobenzene		µg/L			
23	Chlorodibromomethane		µg/L			
24	Chloroethane		µg/L			
25	2-Chloroethylvinyl ether		µg/L			
26	Chloroform		µg/L			
27	Dichlorobromomethane		µg/L			
28	1,1-Dichloroethane		µg/L			
29	1,2-Dichloroethane		µg/L			
30	1,1-Dichloroethylene		µg/L			
31	1,2-Dichloropropane		µg/L			
32	1,3-Dichloropropylene		µg/L			
33	Ethylbenzene		µg/L			
34	Methyl Bromide		µg/L			
35	Methyl Chloride		µg/L			

CTR No.	Priority pollutants	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
36	Methylene Chloride		µg/L			
37	1,1,2,2-Tetrachloroethane		µg/L			
38	Tetrachloroethylene		µg/L			
39	Toluene		µg/L			
40	1,2-Trans-Dichloroethylene		µg/L			
41	1,1,1-Trichloroethane		µg/L			
42	1,1,2-Trichloroethane		µg/L			
43	Trichloroethylene		µg/L			
44	Vinyl Chloride		µg/L			
45	2-Chlorophenol		µg/L			
46	2,4-Dichlorophenol		µg/L			
47	2,4-Dimethylphenol		µg/L			
48	2-Methyl- 4,6-Dinitrophenol		µg/L			
49	2,4-Dinitrophenol		µg/L			
50	2-Nitrophenol		µg/L			
51	4-Nitrophenol		µg/L			
52	3-Methyl 4-Chlorophenol		µg/L			
53	Pentachlorophenol		µg/L			
54	Phenol		µg/L			
55	2,4,6-Trichlorophenol		µg/L			
56	Acenaphthene		µg/L			
57	Acenaphthylene		µg/L			
58	Anthracene		µg/L			
59	Benzidine		µg/L			
60	Benzo(a)Anthracene		µg/L			
61	Benzo(a)Pyrene		µg/L			
62	Benzo(b)Fluoranthene		µg/L			
63	Benzo(ghi)Perylene		µg/L			
64	Benzo(k)Fluoranthene		µg/L			
65	Bis(2-Chloroethoxy)Methane		µg/L			
66	Bis(2-Chloroethyl)Ether		µg/L			
67	Bis(2-Chloroisopropyl)Ether		µg/L			
68	Bis(2-Ethylhexyl)Phthalate		µg/L			
69	4-Bromophenyl Phenyl Ether		µg/L			
70	Butylbenzyl Phthalate		µg/L			
71	2-Chloronaphthalene		µg/L			
72	4-Chlorophenyl Phenyl Ether		µg/L			
73	Chrysene		µg/L			
74	Dibenzo(a,h)Anthracene		µg/L			
75	1,2-Dichlorobenzene		µg/L			
76	1,3-Dichlorobenzene		µg/L			
77	1,4-Dichlorobenzene		µg/L			
78	3,3 Dichlorobenzidine		µg/L			
79	Diethyl Phthalate		µg/L			
80	Dimethyl Phthalate		µg/L			
81	Di-n-Butyl Phthalate		µg/L			
82	2,4-Dinitrotoluene		µg/L			
83	2,6-Dinitrotoluene		µg/L			
84	Di-n-Octyl Phthalate		µg/L			
85	1,2-Diphenylhydrazine		µg/L			

CTR No.	Priority pollutants	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
86	Fluoranthene		µg/L			
87	Fluorene		µg/L			
88	Hexachlorobenzene		µg/L			
89	Hexachlorobutadiene		µg/L			
90	Hexachlorocyclopentadiene		µg/L			
91	Hexachloroethane		µg/L			
92	Indeno(1,2,3-cd)Pyrene		µg/L			
93	Isophorone		µg/L			
94	Naphthalene		µg/L			
95	Nitrobenzene		µg/L			
96	N-Nitrosodimethylamine		µg/L			
97	N-Nitrosodi-n-Propylamine		µg/L			
98	N-Nitrosodiphenylamine		µg/L			
99	Phenanthrene		µg/L			
100	Pyrene		µg/L			
101	1,2,4-Trichlorobenzene		µg/L			
102	Aldrin		µg/L			
103	alpha-BHC		µg/L			
104	beta-BHC		µg/L			
105	gamma-BHC		µg/L			
106	delta-BHC		µg/L			
107	Chlordane (303d listed)		µg/L			
108	4,4'-DDT (303d listed)		µg/L			
109	4,4'-DDE		µg/L			
110	4,4'-DDD		µg/L			
111	Dieldrin (303d listed)		µg/L			
112	alpha-Endosulfan		µg/L			
113	beta-Endosulfan		µg/L			
114	Endosulfan Sulfate		µg/L			
115	Endrin		µg/L			
116	Endrin Aldehyde		µg/L			
117	Heptachlor		µg/L			
118	Heptachlor Epoxide		µg/L			
119-125	PCBs sum (303d listed)		µg/L			
126	Toxaphene		µg/L			
	Tributyltin		µg/L			
	Total PAHs		µg/L			

Discharge Point 2 conventional and non-conventional pollutants:

Parameter	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
Turbidity (0.1 NTU)		NTU			
Total Suspended Solids		mg/L			
Settleable matter		ml/L-hr			
pH (0.1 standard units)		s.u.		Not applicable	
Dissolved Oxygen		mg/L			
Total Dissolved Solids		mg/L			
Chloride		mg/L			
Chlorine Residual		mg/L			
Oil and grease		mg/L			
Acute Toxicity		% survival			

Discharge point 2 priority pollutants:

CTR No.	Priority pollutants	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
1	Antimony		µg/L			
2	Arsenic		µg/L			
3	Beryllium		µg/L			
4	Cadmium		µg/L			
5a	Chromium (III)		µg/L			
5b	Chromium (VI)		µg/L			
6	Copper		µg/L			
7	Lead		µg/L			
8	Mercury		µg/L			
9	Nickel		µg/L			
10	Selenium		µg/L			
11	Silver		µg/L			
12	Thallium		µg/L			
13	Zinc		µg/L			
14	Cyanide		µg/L			
15	Asbestos		fibers/L			
16	2,3,7,8-TCDD (Dioxin)		µg/L			
16-TEQ	2,3,7,8-TCDD TEQ		µg/L			
17	Acrolein		µg/L			
18	Acrylonitrile		µg/L			
19	Benzene		µg/L			
20	Bromoform		µg/L			
21	Carbon Tetrachloride		µg/L			
22	Chlorobenzene		µg/L			
23	Chlorodibromomethane		µg/L			
24	Chloroethane		µg/L			
25	2-Chloroethylvinyl ether		µg/L			
26	Chloroform		µg/L			
27	Dichlorobromomethane		µg/L			
28	1,1-Dichloroethane		µg/L			
29	1,2-Dichloroethane		µg/L			
30	1,1-Dichloroethylene		µg/L			
31	1,2-Dichloropropane		µg/L			
32	1,3-Dichloropropylene		µg/L			
33	Ethylbenzene		µg/L			
34	Methyl Bromide		µg/L			
35	Methyl Chloride		µg/L			
36	Methylene Chloride		µg/L			
37	1,1,2,2-Tetrachloroethane		µg/L			
38	Tetrachloroethylene		µg/L			
39	Toluene		µg/L			
40	1,2-Trans-Dichloroethylene		µg/L			
41	1,1,1-Trichloroethane		µg/L			
42	1,1,2-Trichloroethane		µg/L			
43	Trichloroethylene		µg/L			
44	Vinyl Chloride		µg/L			
45	2-Chlorophenol		µg/L			
46	2,4-Dichlorophenol		µg/L			
47	2,4-Dimethylphenol		µg/L			
48	2-Methyl- 4,6-Dinitrophenol		µg/L			
49	2,4-Dinitrophenol		µg/L			

CTR No.	Priority pollutants	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
50	2-Nitrophenol		µg/L			
51	4-Nitrophenol		µg/L			
52	3-Methyl 4-Chlorophenol		µg/L			
53	Pentachlorophenol		µg/L			
54	Phenol		µg/L			
55	2,4,6-Trichlorophenol		µg/L			
56	Acenaphthene		µg/L			
57	Acenaphthylene		µg/L			
58	Anthracene		µg/L			
59	Benzidine		µg/L			
60	Benzo(a)Anthracene		µg/L			
61	Benzo(a)Pyrene		µg/L			
62	Benzo(b)Fluoranthene		µg/L			
63	Benzo(ghi)Perylene		µg/L			
64	Benzo(k)Fluoranthene		µg/L			
65	Bis(2-Chloroethoxy)Methane		µg/L			
66	Bis(2-Chloroethyl)Ether		µg/L			
67	Bis(2-Chloroisopropyl)Ether		µg/L			
68	Bis(2-Ethylhexyl)Phthalate		µg/L			
69	4-Bromophenyl Phenyl Ether		µg/L			
70	Butylbenzyl Phthalate		µg/L			
71	2-Chloronaphthalene		µg/L			
72	4-Chlorophenyl Phenyl Ether		µg/L			
73	Chrysene		µg/L			
74	Dibenzo(a,h)Anthracene		µg/L			
75	1,2-Dichlorobenzene		µg/L			
76	1,3-Dichlorobenzene		µg/L			
77	1,4-Dichlorobenzene		µg/L			
78	3,3 Dichlorobenzidine		µg/L			
79	Diethyl Phthalate		µg/L			
80	Dimethyl Phthalate		µg/L			
81	Di-n-Butyl Phthalate		µg/L			
82	2,4-Dinitrotoluene		µg/L			
83	2,6-Dinitrotoluene		µg/L			
84	Di-n-Octyl Phthalate		µg/L			
85	1,2-Diphenylhydrazine		µg/L			
86	Fluoranthene		µg/L			
87	Fluorene		µg/L			
88	Hexachlorobenzene		µg/L			
89	Hexachlorobutadiene		µg/L			
90	Hexachlorocyclopentadiene		µg/L			
91	Hexachloroethane		µg/L			
92	Indeno(1,2,3-cd)Pyrene		µg/L			
93	Isophorone		µg/L			
94	Naphthalene		µg/L			
95	Nitrobenzene		µg/L			
96	N-Nitrosodimethylamine		µg/L			
97	N-Nitrosodi-n-Propylamine		µg/L			
98	N-Nitrosodiphenylamine		µg/L			
99	Phenanthrene		µg/L			

CTR No.	Priority pollutants	Value or Range of Values	Units	Test Method	Method Detection Limit	# of samples
100	Pyrene		µg/L			
101	1,2,4-Trichlorobenzene		µg/L			
102	Aldrin		µg/L			
103	alpha-BHC		µg/L			
104	beta-BHC		µg/L			
105	gamma-BHC		µg/L			
106	delta-BHC		µg/L			
107	Chlordane (303d listed)		µg/L			
108	4,4'-DDT (303d listed)		µg/L			
109	4,4'-DDE		µg/L			
110	4,4'-DDD		µg/L			
111	Dieldrin (303d listed)		µg/L			
112	alpha-Endosulfan		µg/L			
113	beta-Endosulfan		µg/L			
114	Endosulfan Sulfate		µg/L			
115	Endrin		µg/L			
116	Endrin Aldehyde		µg/L			
117	Heptachlor		µg/L			
118	Heptachlor Epoxide		µg/L			
119-125	PCBs sum (303d listed)		µg/L			
126	Toxaphene		µg/L			
	Tributyltin		µg/L			
	Total PAHs		µg/L			

Use additional paper for more than two discharge points.

V. RECEIVING WATER INFORMATION

Discharge Point Coordinates into the Receiving State Water:	
Discharge point 1: Latitude: _____	Longitude: _____
Discharge point 2: Latitude: _____	Longitude: _____
Discharge point 3: Latitude: _____	Longitude: _____
Is there any additional receiving water or discharge point?	
<input type="checkbox"/> No <input type="checkbox"/> Yes, if yes, provide the information on a separate sheet.	

VI. LOCATION MAP

Attach a topographic map or maps of the area. The map(s) should clearly show the following:

1. The legal boundaries of the facility;
2. Locations of all the treatment facilities, such as detention ponds;
3. The location and identification number of each of the facility's existing and/or proposed intake and discharge points; and
4. The receiving State water(s) and receiving storm water drainage system(s), if applicable, identified and labeled.

VII. FLOW CHART

Attach a flow chart, line drawing diagram showing the general route taken by the effluent from intake to discharge.

VIII. EFFLUENT AND RECEIVING WATER CHARACTERIZATION FOR SELECTED CONSTITUENTS

Check one:

- ☐ Existing facility. Sampling plan submitted to the Regional Water Board and data are available.
- ☐ New facility. Attach a sampling plan (For developing the plan, see the requirements specified in the Regional Water Board August 6, 2001, Letter available at www.waterboards.ca.gov).

IX. SITE-SPECIFIC BEST MANAGEMENT PRACTICES (BMPs) PLAN

Attach a site-specific BMPs plan on separate sheets with reference to item IX. The site-specific BMPs plan shall address all specific means of controlling the discharge of pollutants from the facility.

- ☐ Site-specific BMPs plan is attached with this NOI.
- ☐ Site-specific BMPs plan will be submitted 30 days before the commencement of the proposed discharge.

X. RECEIVING WATER AMBIENT BACKGROUND CONDITION

If the Discharger wishes to establish receiving water ambient background condition for future compliance demonstration with pH effluent limitations, the Discharger shall submit a statistical analysis and propose appropriate pH values for its receiving waters based on historical receiving water monitoring. The Regional Water Board will use this information and future receiving water monitoring data when considering Discharger's claims.

XI. AUTHORIZATION OF REPRESENTATIVE

1. This statement authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to process the required NOI Form for coverage under the NPDES General Permit for discharge to State waters from the subject facility. The Owner hereby agrees to comply with and be responsible for all the conditions specified in the General Permit.

Company/Organization Name: _____

Street Address: _____

City, State and Zip Code+4: _____

Authorized Contact Person & Title: _____

Phone No.: () _____ Fax No.: () _____

E-mail address: _____

2. A separate authorization statement is attached:

Yes _____ No _____

XII. CERTIFICATION

" I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility and the development and implementation of Pollution Prevention Practices, if required, will be complied with."

Signature _____

Date: _____

Printed Name & Title: _____

Facility/Agency Name: _____

Phone No.: _____

Fax No.: _____

E-mail address: _____

XIII. APPLICATION FEE AND MAILING INSTRUCTIONS

Submit this NOI with attachments and a check made out to the "San Francisco Bay Regional Water Quality Control Board" with the appropriate fee (see NOI instructions Section XII for the applicable fee). Send the complete package to the following address:

San Francisco Bay Regional Water Quality Control Board
Attn: NPDES Wastewater Division
1515 Clay Street, Suite 1400
Oakland, CA 94555

ATTACHMENT C – INSTRUCTIONS FOR COMPLETING NOTICE OF INTENT (NOI) FORM

INSTRUCTIONS FOR NOTICE OF INTENT (NOI) to comply with the terms of the region wide General National Pollutant Discharge Elimination System (NPDES) Permit authorizing discharges from aggregate mining, sand washing, and sand offloading facilities to surface waters.

I. OWNER/OPERATOR INFORMATION

The owner is the organization or person who owns or leases the facility or land where the quarry or sand washing operation is located. For a facility that is one of several owned by a corporation, indicate the corporation name and the name by which the facility is known to the employees (i.e., ABC Inc. - DEF Facility). Provide the street address or a description of the facility location (i.e., 1234 15th Drive or northwest corner of 1st Street and X Avenue). Note that each facility must obtain separate coverage under this General Permit.

II. BILLING ADDRESS

Provide this information only if the annual waste discharge fee should be billed to a different entity.

III. DISCHARGE EFFLUENT INFORMATION

List all possible discharges under item 2 of the table. Discharges that are not listed here will not be covered by this General Permit. An additional NPDES permit may be needed for any other discharge of wastewater to any State waters.

IV. DISCHARGE WATER QUALITY PARAMETERS

For existing facilities, all of the parameters must be tested by a State certified laboratory and reported in this table. Provide a copy of the laboratory data sheets and Chain of Custody documents, as applicable. For new/proposed facility, enter estimated values to this table. Where there is more than one outfall, submit a separate sheet for item IV for each outfall. Test results shall be obtained from a sample representative of the discharge.

V. RECEIVING WATER INFORMATION

If the discharge first enters a separate storm drainage system, provide the name of the receiving State water body that the separate storm drainage system enters. Contact the storm drain system owner about the proposed discharge.

The discharge point is generally the discharge's point of first contact with receiving State waters. Provide the coordinates of each discharge point. A U.S. Geographical Survey (USGS) or any other appropriate map may be used to interpolate the coordinates.

Attach a separate sheet for more than three discharge points. Properly label the discharge points with numbers that correspond to the discharge point label on the location map(s) and flow chart(s) submitted.

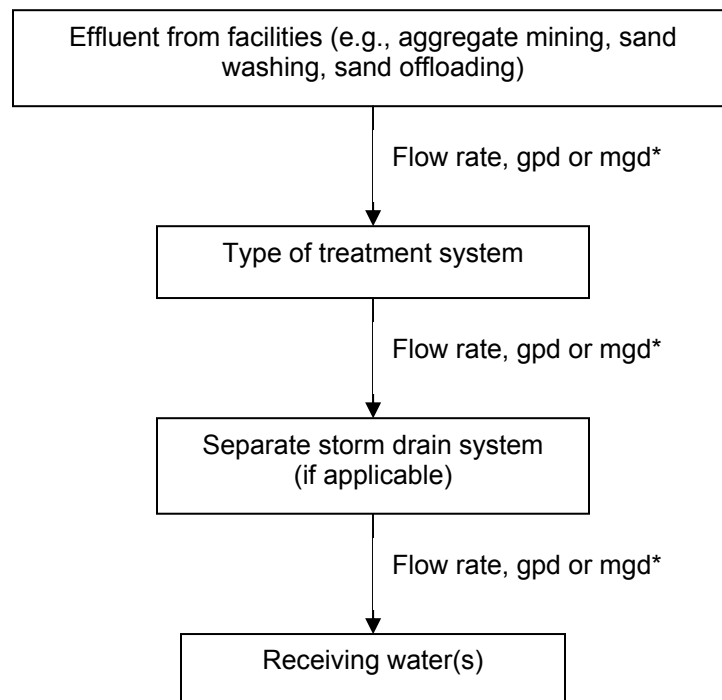
VI. LOCATION MAP

Provide the location map on 8-1/2 by 11 inches sized paper or paper folded to 8-1/2 by 11 inches. Show at least one mile beyond the property boundaries of the facility on the map.

Indicate the discharge point(s) on the location map and include all of the required information. The discharge point(s) may include where the discharge exits the facility and enters the roadway right-of-way and then flows into a separate storm drainage system and/or where the discharge directly enters the State receiving waters.

VII. FLOW CHART

An example of a line drawing is given below. The flow chart shall indicate how the discharge effluent flow from where the wastewater is generated to where it enters the receiving water, including all the treatment systems used to treat the effluent and the approximate amount of flow. The quantity of discharge may be estimated if no data are available.



* gpd – gallons per day
mgd – million gallons per day

VIII. EFFLUENT AND RECEIVING WATER CHARACTERIZATION FOR SELECTED CONSTITUENTS

Existing Dischargers, covered under the General Permit or currently holding an individual NPDES permit, if previously required by the Regional Water Board to sample for selected constituents according to the August 6, 2001 Letter, shall submit a final report presenting the sampling results 180 prior to expiration date of this General Permit. The Discharger, if not reporting data electronically through Regional Water Board's Electronic Reporting System (ERS), shall also submit conventional, non-conventional, and toxic pollutants data in electronic format.

New Dischargers shall submit a sampling plan with this NOI using Enclosure D of the Regional Water Board's August 6, 2001, Letter as a guide for development of sampling plan development. The sampling plan shall also include the date for submitting a report of the results.

IX. SITE-SPECIFIC BEST MANAGEMENT PRACTICES (BMPs) PLAN

An existing Discharger holding an individual NPDES permit prior to this General Permit coverage shall submit the site-specific BMPs plan with this NOI. A new Discharger has the option of submitting its BMPs plan with this NOI or 30 days before commencement of the proposed discharge. The site-specific BMPs plan shall include, at a minimum the following information:

1. **Facility Operation** - Describe the nature of the facility operation:
 - (1) Type of facility, e.g., aggregate mining, sand washing, or sand offloading,
 - (2) Types of products;
 - (3) Types of materials and equipment used at the facility.
2. **Potential Pollutants** - Describe potential pollutants that will be generated by the facility. These pollutants may include, but may not be limited to:
 - (1) Soil, sediments or silt from rock and sand washing;
 - (2) Discharge associated with operation and maintenance of equipment, such as oil and grease and hydraulic fluid leakage and spills;
 - (3) Any debris generated by the operation;
 - (4) Storm water runoff from exposed oil, fuel or any hazardous material storage locations and containment structures;
 - (5) Alkaline material from cement mix operations, etc.
3. **Pollution Control and Effluent Treatment Methods** – Describe in detail the control and treatment measures for each of the potential pollutants identified under item IX.2 above:
 - (1) Prevention measures to be implemented to prevent the pollutants from entering the effluent and receiving water;

- (2) Effluent treatment methods to be implemented on-site to remove the pollutants in the effluent (indicate the treatment system locations on the location map); and
- (3) Maintenance procedures and maintenance schedules to maintain the effluent treatment system.

X. AUTHORIZATION OF REPRESENTATIVE

Authorization statements are provided for the owner to complete if he wishes to authorize a representative to process this NOI for him. A standard authorization statement is provided under item XI. The owner may provide his own customized statement in a separate letter if the standard statement does not appropriately limit the authority. If a separate authorization letter is provided, this letter shall be signed by the qualified person (see item XI below for the requirement of the qualified person).

Provide the duly authorized representative's information in the applicable item(s). There shall be only one duly authorized representative at any time. The owner may change the designated duly authorized representative at any time during the processing of this NOI. The duly authorized representative will no longer be authorized effective as of the date of receipt of any new authorization statement from the owner.

XI. RECEIVING WATER AMBIENT BACKGROUND CONDITION

This submittal is optional.

When performing a statistical analysis to establish background condition for pH, the Discharger shall consider all available receiving water data collected upstream of discharges. All data can be used only when there are no increasing or decreasing trends. The Discharger may develop seasonal background condition when data show seasonality. The submittal shall include a detailed analysis, a conclusion, and a complete compilation of data used for the analysis.

XII. CERTIFICATION

The person certifying this NOI Form must meet one of the following descriptions and be employed by the owner listed in item I (refer to 40CFR 122.22 for more detailed requirements):

- For a corporation: (1) A president, secretary treasurer, or vice president of the corporation in charge of the principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

- For a municipality, State, Federal or other public agency: either a principal executive officer or ranking elected official.

XIII. APPLICATION FEE AND MAILING INSTRUCTIONS.

No application will be considered complete without the applicable fee. For discharges regulated under this General NPDES Permit, annual fees are based on California Code of Regulations (CCR) Title 23, Division 3, Chapter 9, Section 2200 (b) (9). The Regional Water Board may modify this instruction at any time to reflect a new CCR fee schedule. At this time, the application fee is **\$3,437** per discharge outfall.

Submit the complete NOI, with attachments, and the fee, to the Regional Water Board mailing address as indicated in the NOI.

ATTACHMENT D – FEDERAL STANDARD PROVISIONS**I. STANDARD PROVISIONS – PERMIT COMPLIANCE****A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR §122.41].

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR §122.41(e)].

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5].

F. Inspection and Entry

The Discharger shall allow the Regional Water Quality Control Board (Regional Water Board), State Water Resources Control Board (SWRCB), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(f)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions – Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
 - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR §122.41(f)].

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3) [40 CFR §122.61]].

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].

- B.** Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].

C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:

1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, SWRCB, or USEPA within a reasonable time, any information which the Regional Water Board, SWRCB, or USEPA

may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, SWRCB, or USEPA copies of records required to be kept by this Order [40 CFR §122.41(h)] [CWC 13267].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, SWRCB, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:
 - a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 CFR §122.22(a)(1)];
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or
 - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, SWRCB, or USEPA shall be signed by a person described in paragraph (b) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in paragraph (2.) of this provision [40 CFR §122.22(b)(1)];
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of

- plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and
- c. The written authorization is submitted to the Regional Water Board, SWRCB, or USEPA [40 CFR §122.22(b)(3)].
 4. If an authorization under paragraph (3.) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (3.) of this provision must be submitted to the Regional Water Board, SWRCB or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22I].
 5. Any person signing a document under paragraph (2.) or (3.) of this provision shall make the following certification:
“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations” [40 CFR §122.22(d)].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or SWRCB for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
 - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)l].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements

under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)].

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or SWRCB of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 CFR §122.41(l)(2)].

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, SWRCB, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be

subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].

- B. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR §122.41(a)(3)].
- C. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR §122.41(j)(5)].
- D. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that

discharge will exceed the highest of the following “notification levels” [40 CFR §122.42(a)(1)]:

- a. 100 micrograms per liter (µg/L) [40 CFR §122.42(a)(1)(i)];
 - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
 - d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(1)(iv)].
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels” [40 CFR §122.42(a)(2)]:
- a. 500 micrograms per liter (µg/L) [40 CFR §122.42(a)(2)(i)];
 - b. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
 - d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the Federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Reporting responsibilities of waste Dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Water Board's Resolution No. 73-16.
- B.** The principal purposes of a monitoring program by a waste Discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by the Regional Water Board, (2) to facilitate self-policing by the waste Discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.
- C.** Sampling is required during the entire year when discharging. All analyses shall be conducted using current USEPA methods that have been approved by the USEPA Regional Administrator pursuant to 40 CFR 136.4 and 40 CFR 136.5, or equivalent methods that are commercially and reasonably available and that provide quantification of sampling parameters and constituents sufficient to evaluate compliance with applicable effluent limits and to perform reasonable potential analysis. Equivalent methods must be more sensitive than those specified in 40 CFR 136, must be specified in the permit, and must be approved for use by the Executive Officer following consultation with the State Water Resources Control Board's Quality Assurance Program.
- D.** Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- E.** Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the Discharger and accessible and retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board or Regional Administrator of the U.S. Environmental Protection Agency, Region IX. Such records shall show the following for **each** sample:

1. Identity of sampling and observation stations by number.
 2. Date and time of sampling and/or observations.
 3. Method of sampling.
 4. Full report for rainbow trout bioassay test (96-hour static bioassay renewal).
 5. Date and time that analyses are started and completed, and name of personnel performing the analyses.
 6. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to a specific section of Standard Methods (SM) or the standard USEPA method number is satisfactory.
 7. Calculations of results.
 8. Results of analyses and/or observations.
- F.** If the Discharger wishes to invalidate any measurement, the letter of transmittal will include a formal request to invalidate the measurement, the original measurement in question, the reason for invalidating the measurement, all relevant documentation that supports the invalidation (e.g., laboratory sheet, log entry, test results, etc.), and discussion of the corrective actions taken or planned (with a time schedule for completion) to prevent recurrence of the sampling or measurement problem. The invalidation of a measurement requires the approval of Water Board staff and will be based solely on the documentation submitted at that time.
- G.** A tabulation reflecting bypassing and accidental waste spills shall be maintained.
- H.** A copy of this Order, a complete copy of the Notice of Intent filed, documentation of the authorization to discharge received from the Regional Water Board, a full copy of the O&M Manual, and any other documents relevant to the operation and maintenance of the treatment facility shall be stored at or near the treatment facility. These documents help the Dischargers' staff responsible for compliance assurance activities and shall be made available to Regional Water Board staff during inspections. The Dischargers' staff responsible for compliance assurance activities shall inspect the Facility as frequent as required by the O&M Manual.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Effluent	M-001 through M-"n" (E-xx ^[2])	At any point in the outfall between the point of discharge to the receiving water(s) and the point at which all waste tributary to that outfall is present. If the effluent first discharges into a separate storm drain system, the sampling point for compliance purpose shall be the point at which all waste tributary to the outfall and before commingling with the water in the storm drain.
Receiving Waters ^[1]	R-001(A,B,C,...) (CB-XX ^[2])	At a point in the receiving water and located upstream of the discharge point where impacts from the discharge would not be expected ^[3] .
	R-002(A,B,C,...) (C-XX ^[2])	At a point in the receiving water on the edge of the mixing zone ^[3] ; or if mixing zone cannot be determined, within 50 feet downstream of the discharge outfall.

Footnote [1] If there is only one discharge outfall, the name R-001 or R-002 should be used. Otherwise, R-001A and R-002A for discharge point 001, R-001B and R-002B for discharge point 002, and so on are used for multiple discharge locations.

[2] The names in the parenthesis are those used in the previous General Permit.

[3] The Discharger can determine the exact receiving water sampling locations if a mixing zone can be determined based on a previous study.

III. REQUIRED EFFLUENT SAMPLING, ANALYSES AND OBSERVATIONS

Effluent monitoring is only required when discharging to the receiving waters. The schedule of effluent sampling, analysis and observation shall be that given in Tables E-2 and E-3 below.

Table E-2. Schedule of Sampling, Analysis, and Observations for Aggregate Mining and Sand Washing Facilities

Parameter	Units [1]	Sample Type[2]	Minimum Sampling Frequency [3]
Flow Rate and volume [4]	MGD/MG	Continuous or daily	1/day
Total settleable matter	ml/L/hr	Grab	2/week
Total Dissolved solids [5]	mg/L	Grab	1/month
Chloride [5]	mg/L	Grab	1/month
Total Suspended Solids [6]	mg/L	C-24	2/week
Chlorine Residual [7]	mg/L	Grab	2/week
Turbidity	NTU	Grab	2/week
pH	s.u.	Grab	2/week
Oil and grease	mg/L	Grab	1/month
Acute Toxicity [8]	% survival	C-24	2/year
Copper	µg/L	C-24	1/quarter

Parameter	Units [1]	Sample Type[2]	Minimum Sampling Frequency [3]
Mercury [9]	µg/L	C-24/Grab	1/quarter
Selenium [10]	µg/L	C-24	1/quarter
Cyanide	µg/L	Grab	1/quarter
Arsenic, chromium VI, lead, nickel, silver, zinc, thallium	µg/L	Grab or C-24 as specified by testing method	Quarterly for first year of operation under this Order and if not triggered twice a year thereafter
Carbon tetrachloride, 1,1-dichloroethylene [11]	µg/L	Grab	Twice per year for three years, if not triggered, once per year thereafter
Other pollutants that may be present in the influent and/or effluent [12]	µg/L	Grab or C-24 as specified by testing method	[13]
All other priority pollutants not listed above	µg/L	Grab or C-24 as specified by testing method	1/5 years
Standard Observations [14]		--	1/day

Table E-3. Schedule of Sampling, Analysis, and Observations for Sand Offloading Facilities

Parameter	Units [1]	Sample Type[2]	Minimum Sampling Frequency [3]
Flow Rate and volume [4]	MGD/MG	Continuous or daily	1/day
Total settleable matter	ml/L/hr	Grab	2/week
Turbidity	NTU	Grab	2/week
pH	s.u.	Grab	2/week
Oil and grease	mg/L	Grab	1/month
Standard observation	---	---	1/day

Footnotes for Tables E-2 and E-3

[1] Unit Abbreviations

MGD = million gallons per day
MG = million gallons
mg/L = milligrams per liter
ml/L/hr = milliliters per liter, per hour
s. u. = standard units

[2] Sample Type

Continuous = measured continuously, and recorded and reported daily

C-24 = 24-hour composites may be made up of discrete grabs collected over the course of a day and volumetrically or mathematically flow-weighted. Samples for inorganic pollutants may be combined prior to analysis. At least one sampling day in each week shall reflect one day of peak loading and during major unit operation shutdown or startup.

Grab = Grab samples of effluent shall be collected during periods of maximum peak flows and shall coincide with effluent composite sample days.

Samples shall be taken on random days.

- [3] Minimum sampling frequency. If the discharge lasts less than one day in a 7-day period, the twice per week (2/week) monitoring frequency is once per discharge.

If two consecutive samples of a constituent monitored on a weekly or monthly basis in a 30-day period exceed the monthly average effluent limit for any parameter, (or if the required sampling frequency is once per month and the monthly sample exceeds the monthly average limit), the sampling frequency shall be increased to daily until the additional sampling shows that the most recent 30-day moving average is in compliance with the monthly average limit.

If any maximum daily limit is exceeded, the sampling frequency shall be increased to daily until two samples collected on consecutive days show compliance with the maximum daily limit.

- [4] Flow Monitoring.

Flows shall be monitored at each discharge outfall by flow meters or estimated if no flow meter is in place and the following shall be reported in self-monitoring reports:

- a. Daily total flow volume (MG).
- b. Discharge duration during a day, in hours.
- c. Daily average flow rate (MGD), if not measured directly, calculated using a. and b. data above. If duration is not recorded, specify averaging period, i.e., 24 hours vs. estimated discharging hours.
- d. Monthly total flow volume (MG).
- e. Discharge days during a month.
- f. Average daily maximum and average daily minimum flow rates (MGD) of discharge days (i.e., do not report zero) in a month.

Flows discharge through all authorized outfalls shall be reported, this includes all wastewater and storm water.

Some discharge points are not equipped with flow meters; flows can be estimated in this case. The Executive Officer may require the Discharger to install flow meters during the permit term.

- [5] Total dissolved solids and chloride monitoring is only required for discharges to fresh water bodies supporting municipal supply or ground water recharge. Monitoring for these pollutants must be on the same day of receiving water monitoring.
- [6] Total suspended solids monitoring is **not** required for marine sand washing facilities. When salt water TSS analytical method becomes available, the Regional Water Board Executive Officer may require the Dischargers to collect TSS data to determine the feasibility to comply with the TSS effluent limits for aggregate mining facilities as the basis for establishing effluent limits for future permit reissuance.
- [7] Chlorine residual is only required for sand washing facilities that use municipal water supply as wash water.
- [8] Acute Toxicity monitoring (96-hour static renewal bioassay test). The test shall be performed according to Section IV below.
- [9] Mercury. The Discharger shall use ultra-clean sampling methods (USEPA 1669) to the maximum extent practicable and ultra-clean analytical methods (USEPA 1631) for mercury monitoring. The Discharger may use alternative methods of analysis (such as USEPA 245) if that alternate method has a method detection limit (MDL) of 0.0002 µg/L or less.
- [10] Selenium must be analyzed for by ICP/MS or the atomic absorption gaseous hydride procedure (USEPA 200.8 or standard method 3114B or C).

- [11] Carbon tetrachloride and 1,1-dichloroethylene. Only facilities discharging into a water body supporting municipal water supply or ground water recharge is required for the monitoring for these two pollutants.
- [12] Priority pollutants are those pollutants identified as Compound Nos. 1 – 126 by the California Toxics Rule at 40 CFR 131.38.
- [13] The Regional Water Board Executive Officer may determine during the permit term that specific pollutants of concern may be present in the discharge. The Executive Officer will require the Discharger to sample for these pollutants after such determination is made. The likely sampling frequency is twice per year for three years and, if not triggered, once per year thereafter.
- [14] Standard observations include both receiving water and wastewater discharge:
- a. Receiving Water:
 - [1] Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter, presence or absence, source, and size of affected area.
 - [2] Discoloration and turbidity: description of color, source, and size of affected area.
 - [3] Depth of water columns and sampling depths.
 - b. Weather conditions:
 - [1] Air temperatures;
 - [2] Total precipitation during the previous five days and on the day of observation.
 - c. Wastewater Effluent: Floating and suspended material of waste origin (to include oil, grease, sand, and other macroscopic particulate matter): presence or absence, source, and size of affected area.

IV. WHOLE EFFLUENT ACUTE TOXICITY TESTING REQUIREMENTS

Compliance with the whole acute toxicity requirements of this Order shall be achieved in accordance with the following:

1. Acute toxicity of effluent limits shall be evaluated by measuring survival of test organisms exposed to 96-hour static renewal bioassays.
2. Test species shall be the current species or a species approved by the Executive Officer.
3. All bioassays shall be performed according to 40 CFR 136, currently the “Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms,” 5th Edition. Exceptions may be granted by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).
4. If specific identifiable substances in the discharge can be demonstrated by the Discharger as being rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limit may be determined after the test samples are adjusted to remove the influence of those substances. Written approval from the Executive Officer must be obtained to authorize such an adjustment.
5. Effluent used for fish bioassays must be dechlorinated prior to testing if there is chlorine residual in the effluent. Monitoring of the bioassay water shall include, on a

daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported. If the fish survival rate in the effluent is less than 70 percent or if the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new batches of fish and shall continue back to back until compliance is demonstrated.

6. The Discharger may indicate in the NOI the previous approvals by the Executive Officer and request for re-confirmation, e.g., testing species, renewal interval, etc. The Discharger may continue its current practice as long as a new method (currently the 5th edition method) allows such a variation.

V. LAND DISCHARGE MONITORING REQUIREMENTS

Not applicable.

VI. RECLAMATION MONITORING REQUIREMENTS

Not applicable.

VII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Surface Water Monitoring at R-001(A, B, C,..) through R-“n”

The Discharger shall monitor both upstream and downstream of discharge outfall according to Table E-4 below:

Table E-4. Receiving Water Monitoring Requirements [1]

Parameter	Units [2]	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L and % saturation	Grab	1/month
Turbidity	NTU	Grab	1/month
pH	s.u.	Grab	1/month
Total Dissolved Solids [3]	mg/L	Grab	1/month
Chloride [3]	mg/L	Grab	1/month
Temperature			
Hardness [4]	mg/L as CaCO ₃	Grab	1/month
Salinity [4]	ppt	Grab	1/month

Footnotes for Tables E-4

- [1] a. Receiving water samples shall be collected on days coincident with composite sampling of effluent.
- b. Receiving water samples shall be collected at each station on each sampling day during the period within 1 hour following low slack water. Where sampling at lower slack water period is not practical, sampling shall be performed during higher slack water period. Samples shall be

collected within the discharge plume and down current of the discharge point so as to be representative, unless otherwise stipulated.

- c. Samples shall be collected within one foot below the surface of the receiving water body, unless otherwise stipulated.

[2] Unit Abbreviations

s.u. = pH standard unit

mg/L = milligrams per liter

ppt = parts per thousand

- [3] Total dissolved solids is only required for discharges into fresh water bodies supporting municipal water supply or ground water recharge.

- [4] Salinity and hardness monitoring is only required for discharges into fresh and estuarine water bodies.

B. Ground Water Monitoring.

Not applicable.

VIII. LEGENDS FOR TABLES

<u>Sampling Frequency</u>	<u>Legend</u>
1/day	= Once per day
2/week	= Twice per week
1/week	= Once per week
1/month	= Once per month
1/quarter	= Once per quarter
1/5 years	= Once every five years

IX. OTHER MONITORING REQUIREMENTS

Not applicable.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (**Attachment D and G**) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.
2. **Quarterly Reports.** The Discharger shall submit **quarterly** Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods

or other test methods specified in this Order. Quarterly reports shall be due 30 days after the end of each quarter.

3. **Annual Reports.** By February 1st of each year, the Discharger shall submit an annual report to the Regional Water Board covering the previous calendar year. The report shall contain the items described in Standard Provisions and Reporting Requirements, and SMP Part A, August 1993 (**Attachment G**).

- C. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period
Continuous	Effective date of permit	All
1/day	Effective date of permit	Daily
2/week	Effective date of permit	Twice per week
1/week	Effective date of permit	Once per week
1/month	Effective date of permit	Once per calendar month
1/quarter	Effective date of permit	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
2/year	Effective date of permit	Once during wet season (normally during November 1 through April 30), once during dry season (normally during May 1 through October 31)
1/year	Effective date of permit	January 1 through December 31, alternate between once during dry season (normally May 1—October 31), once during wet season (normally November 1—April 30)
1/5 years	Effective date of permit	Once during the permit term

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the

- reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. The Dischargers shall instruct laboratories to establish calibration standards so that the RL value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. The Discharger shall not use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
- 5. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.
 - 6. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - 7. SMRs must be submitted to the Regional Water Board, signed and certified as required by the standard provisions (**Attachment D** and **G**), to the address listed below:

Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: NPDES Wastewater Division
 - 8. The Discharger has the option to submit all monitoring results in an electronic reporting format approved by the Executive Officer. The Electronic Reporting System (ERS) format includes, but is not limited to, a transmittal letter, summary of violation details and corrective actions, and transmittal receipt. If there are any discrepancies between the ERS requirements and the "hard copy" requirements listed in the MRP, then the approved ERS requirements supercede.

C. Discharge Monitoring Reports (DMRs)

- 1. As described in Section XI.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to one of these addresses listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format as EPA Form 3320-1.

D. Other Reports

Not applicable.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

I. PERMIT INFORMATION

This Order reissues the NPDES General Permit in Order No. R2-2002-0063 (the previous Order or previous permit), adopted by the Regional Water Board on June 19, 2002. It regulates discharges from aggregate mining, sand washing, and sand dredging (offloading) facilities.

II. FACILITY DESCRIPTION

A. General Description of the Facilities

1. **Aggregate mining facilities.** These facilities are generally aggregate mining and processing facilities, which produce various grades of aggregates for construction uses. Some aggregate mining facilities have a ready-mix concrete plant and/or an asphalt plant on the same property. Most facilities have oil, grease, fuel and other chemical storage as part of a maintenance shop to provide maintenance for the equipment used in aggregate mining and aggregate transportation. Aggregate mining results in a pit in the ground. Inactive mining pits are used as water detention ponds. Groundwater seeping into the active mining pit is pumped to a series of detention ponds. The water from the last detention pond is used for aggregate washing and dust control at the facility. Some facilities have on-site wells to supply additional water for aggregate washing. All wash water flows to detention ponds before discharge.
2. **Marine Sand washing facilities.** Sand dredged from various locations in San Francisco Bay is transported by barges and offloaded by conveyor belt to these facilities. Wet sand is stockpiled at the facility on the ground or stored in settling ponds. The majority of reclaimed sand is screened and sold for construction uses. A small amount of sand is washed (to remove salt) for use in concrete production. Most of the facilities have oil, grease, fuel and other chemical storage as part of a maintenance shop/shed to provide maintenance for on-site equipment.
3. **Sand offloading facilities.** These facilities have similar operations as those sand washing facilities described in Finding A.2 above, except the sand is offloaded by hydraulic slurry, and no sand washing is involved.
4. **Existing facilities and new facilities.** An existing facility is a facility that is covered under Order No. R2-2002-0063 or that holds an individual NPDES permit for its discharge. A new facility is a facility that is still under construction or that has completed its construction but has not commenced discharge to State waters.

B. General Description of the Discharges

1. **Discharge from aggregate mining facilities.** The wastewater at the facilities, such as water from the mining pit, storm water runoff from the facility yard, aggregate wash water, and runoff from dust control spray, flow into a series of detention ponds.

Pollutants in the discharge from aggregate mining facilities consist mainly of solids that are not settled out in the detention ponds and dissolved solids, which come from groundwater. The discharge may include toxic pollutants from the groundwater, or the storm water runoff from the facility (e.g., toxic materials not properly stored at the facility).

2. **Discharge from marine sand washing facilities.** Discharges from sand washing facilities normally consist of a combination of bay water that has drained from the sand piles during drying (or bay water that overflows from sand settling ponds if hydraulic dredging is used), water used for sand washing and screening, and storm water runoff from the facility yard. Potable water from a municipal source or from local wells is normally used to wash the sand. Water from municipal sources normally contains chlorine residual. This Order requires sand washing facilities that use municipal water supply as wash water to monitor chlorine residual in the discharge. Zinc phosphate is used in some water systems as a corrosion-protecting agent, and copper is used to control algae. Copper and galvanized steel are also widely used for water supply pipes. Therefore, copper and zinc may be present in the sand wash water.
3. **Discharge from sand offloading facilities.** Discharges from sand offloading facilities normally consist of bay water that has drained from the sand piles during drying, or bay water that overflows from sand settling ponds if hydraulic dredging is used, and storm water runoff from the facility yard.

C. Discharge Points and Receiving Waters

The Order applies to all qualified discharges to all receiving waters of the San Francisco Bay Region, including inland surface waters and enclosed bays. The beneficial uses of these receiving waters are described in Section II, Findings, of the Order.

D. Summary of Existing Requirements

Order No. R2-2002-0063 includes the following effluent limitations:

Constituents	Daily Maximum	30-day Arithmetic Mean	7-day Arithmetic Mean	90-day Arithmetic Mean
a. Total Dissolved Solids, mg/L ⁽¹⁾	500	---	---	360
b. Chlorides, mg/L ⁽¹⁾	250	---	---	60
c. Total Suspended Solids, mg/L	---	30	45	---
d. Turbidity, NTU	40	---	---	---
e. Total Settleable Solids, mL/1-hr	0.2	0.1	---	---
f. Chlorine Residual, mg/L	0.0	---	---	---
g. pH, in pH units ⁽³⁾	6.5-8.5 (not less than 6.5 and not greater than 8.5)			
h. Acute Toxicity	The survival of bioassay test organism(s) ⁽⁴⁾ in 96-hour bioassays of undiluted effluent in a single-sample maximum shall be at least 70%. A bioassay test showing survival of less than 70% represents a violation of this effluent limit.			

Note (1) Total Dissolved Solids and Chlorides limits apply only to discharges to Alameda Creek above Niles. Exceedance of the dissolved solids or chloride limits does not constitute a violation if the discharger demonstrates that the source water is also high in dissolved solids or chloride concentration and the exceedance is not caused by its facility operation.

(2) Chlorine residual limit applies only to sand washing facilities that use municipal water supply as wash water.

(3) Exceedance of pH limit does not constitute a violation if the discharger demonstrates that the source water is also high in pH and the high pH in its discharge effluent is not caused by its operations.

Dischargers expected to seek coverage under this General Permit include some that have been authorized to discharge under individual NPDES permits and/or Waste Discharge Requirements. The individual permits may have different discharge requirements. For example, one individual NPDES permit for discharges from sand offloading facilities (bay water return flow) only contains effluent limitations for settleable matter and pH.

E. Planned Changes

As required in **Attachment D** and Provision VI.10.c, a Discharger authorized under this Order is required to submit a notice before making any material change in the character, location, or volume of the discharge.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and its implementing regulations adopted by the USEPA, and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for the point source discharges described herein to surface waters of the Region. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4,

chapter 4, Division 7 of the California Water Code (commencing with section 13260). Pursuant to NPDES regulations at 40 CFR 122.28, States may request authority to issue general NPDES permits. On June 8, 1989, the State Water Board applied to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10, including a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Water Board's request, granting authorization for the State to issue general NPDES permits.

Pursuant to NPDES regulations at 40 CFR 122.28(a)(2), general permits may be used to regulate point source discharges that:

1. Involve the same or substantially similar types of operations,
2. Discharge the same types of wastes,
3. Require the same effluent limitations,
4. Require the same or similar monitoring, and
5. In the opinion of the Executive Officer, are more appropriately controlled under a general permit than under individual permits.

This Order becomes effective approximately on the date indicated provided the Regional Administrator of USEPA has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn. This general permit does not cover direct discharges to the Pacific Ocean.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with CWC Section 13389.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the San Francisco Basin* (Region 2) (hereinafter the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses of any water body specifically identified in Chapter 2 of the Basin Plan generally apply to its tributary streams. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes a policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Applicable beneficial uses of surface waters of the San Francisco Bay Region are listed below.

- Agricultural Supply
- Areas of Special Biological Significance
- Cold Freshwater Habitat
- Ocean, Commercial and Sport Fishing
- Estuarine Habitat
- Freshwater Replenishment
- Groundwater Recharge
- Industrial Service Supply
- Marine Habitat
- Fish Migration
- Municipal and Domestic Supply
- Navigation
- Industrial Process Supply
- Preservation of Rare or Endangered Species
- Water Contact Recreation
- Non-Contact Water Recreation
- Shellfish Harvesting
- Fish Spawning
- Warm Freshwater Habitat
- Wildlife Habitat

This Order implements applicable provisions of the Basin Plan.

2. **Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, amending it on May 4, 1995 and November 9, 1999, and adopted the CTR on May 18, 2000, amending it on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to discharges from this facility
4. **State Implementation Policy.** On March 2, 2000, State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The State Water Board amended the SIP on February 24, 2005, and the amendments became effective on May 31, 2005. The

SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs) and requires dischargers to submit data sufficient to do so.

5. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. [40 C.F.R 131.21; 65 Fed. Reg. 24641 (April 27, 2000)] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
6. **Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, incorporating the requirements of the federal antidegradation policy and requiring that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in Section IV.G of this Fact Sheet the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution 68-16.
7. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303 (d) (4) and NPDES regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in detail elsewhere in this Fact Sheet (**Attachment F**), the prohibitions, limitations, and conditions of this Order are consistent with applicable federal and State anti-backsliding requirements.
8. **Monitoring and Reporting Requirements.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC Sections 13267 and 13383 authorize the Regional Water Boards to require technical and monitoring reports. The MRP, included as **Attachment E** to this Order, establishes monitoring and reporting requirements to implement federal and State requirements. The MRP may be amended by the Executive Officer pursuant to USEPA regulation 40 CFR 122.62, 122.63, and 124.5.

D. Impaired Water Bodies on CWA 303 (d) List

On June 6, 2003, the USEPA approved a revised list of impaired water bodies prepared by the State pursuant to CWA section 303(d) - specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources.

1. **Total Maximum Daily Loads.** The Regional Water Board plans to adopt TMDLs for pollutants on the 303 (d) list in the San Francisco Bay Region within the next ten

years. Future review of the 303 (d)-list for the Bay may result in revision of the schedules, provide schedules for other pollutants, or both.

2. **Wasteload Allocations.** TMDLs will establish waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, and will result in achieving applicable water quality standards for the impaired waterbodies. Final effluent limitations for impairing pollutants for this Discharger will ultimately be based on WLAs derived from the TMDLs.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, three options exist to protect water quality: (1) 40 CFR 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); (2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or (3) an indicator parameter may be established.

The Basin Plan prohibits discharge of any wastewater that has particular constituents of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1. The wastewater discharges regulated by this Order may be exempted from these prohibitions because the main pollutant of concern in the effluent is silt or sediment washed off the sand and gravel. There are effluent limits in this Order to limit the discharge of these pollutants. In general there should be no water quality concerns as long as the discharges are in compliance with these effluent limits. In part, the Basin Plan states:

“This prohibition will (a) provide an added degree of protection from the continuous effects of waste discharge, (b) provide a buffer against the effects of abnormal discharges caused by temporary plant upsets or malfunctions, (c) minimize public contact with undiluted wastes, and (d) reduce the visual (aesthetic) impact of waste discharges.”

As indicated in the Basin Plan, discharges of treated sewage and other discharges where the treatment processes is subject to upset contain particular characteristics of concern. The dilution requirement is to provide a contingency in the event of temporary treatment plant malfunction and to minimize public contact with undiluted treated sewage. However, the discharges here do not contain treated sewage and does not contain wastewater from a treatment process subject to upset. Therefore, the prohibition does not apply in this event.

Even if this prohibition did apply, the Basin Plan provides an exception: “Exceptions ... will be considered where: An inordinate burden would be placed on the discharger relative to

beneficial uses protected” Prohibition of the discharges from these facilities would result in closing the businesses, which would cause shortages of construction materials for housing, road, and other development needs.

Several specific factors affecting the development of limitations and requirements in this Order are discussed as follows:

A. Discharge Prohibitions

1. Prohibition 1 (discharges shall comply with the permit condition):

This prohibition is based on the Basin Plan to protect beneficial uses of the receiving water from un-permitted discharges, and the intent of sections 13260 through 13264 of the California Water Code relating to the discharge of waste to State Waters without filing for and being issued a permit. This prohibition is unchanged from the previous permit.

2. Prohibitions 2, 3 & 4 (no discharge of silt, sand, clay, other earthen materials, oil and grease; on-site storage of chemicals):

These prohibitions are based on narrative objectives for sediments, settleable matters, suspended and floating materials specified in Chapter 3 of the Basin Plan. These prohibitions are unchanged from the previous permit.

3. Prohibition 5 (no bypassing retention ponds):

Retention ponds are the primary form of treatment at the facilities covered under this general permit. Bypassing any ponds would greatly reduce effluent quality. This prohibition is based on 40 CFR 122.42 (m).

B. Technology-Based Effluent Limitations

CWA Section 301(b) and NPDES regulations at 40 CFR 122.44 require permits to, at a minimum, meet applicable technology-based requirements and any more stringent effluent limitations necessary to meet applicable water quality standards.

The CWA requires the USEPA to develop effluent limitations, guidelines and standards (Effluent Limitations Guidelines - ELGs) representing application of best practicable treatment control technology (BPT), best available technology economically achievable (BAT), best conventional pollutant control technology (BCT), and best available demonstrated control technology for new sources (NSPS), for specific industrial categories. Where USEPA has not yet developed ELGs for a particular industry or a particular pollutant, Section 402(a)(1) of the CWA and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for all pollutants “which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.” The process for determining “Reasonable Potential” and calculating WQBELs, when necessary, is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other State plans and policies, the CTR, and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Order authorizes eligible discharges to inland surface waters, enclosed bays, and estuaries within the San Francisco Bay Region. Beneficial uses of these receiving waters, as designated by the Basin Plan, are described in Section II, Findings, of the Order. The water quality criteria applicable to these receiving waters are established by the NTR, CTR, and the Basin Plan.

- a. **Basin Plan.** The Basin Plan specifies numeric WQOs for various conventional pollutants (pH, chlorine, total dissolved solids and chloride for municipal water supply and ground water recharge in the Alameda Creek above Niles, and whole effluent acute toxicity) and 10 priority toxic pollutants, as well as narrative WQOs for toxicity and bioaccumulation in order to protect beneficial uses. The priority pollutants for which the Basin Plan specifies numeric objectives are arsenic, cadmium, chromium (VI), copper in freshwater, lead, mercury, nickel, silver, zinc, and cyanide (see also c., below). The narrative toxicity objective states in part “[a]ll waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.” The bioaccumulation objective states in part “[c]ontrollable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered.” Effluent limitations and provisions contained in this Order are designed to implement these objectives based on available information.
- b. **CTR.** The CTR specifies numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries, except in certain cases where the Basin Plan’s numeric objectives in Tables 3-3 and 3-4 apply over the CTR (except in the South Bay south of the Dumbarton Bridge).
- c. **NTR.** The NTR established numeric aquatic life criteria for selenium, numeric aquatic life and human health criteria for cyanide, and numeric human health

criteria for 34 toxic organic pollutants for waters of San Francisco Bay upstream to, and including, Suisun Bay and the Sacramento-San Joaquin Delta. This includes the receiving water for this Discharger.

D. Specific Basis for Technology- and Water Quality-Based Effluent Limitations

This Order includes both technology-based and water quality effluent limits for three categories of discharges: aggregate mining, marine sand washing, and sand offloading facilities. Effluent limits for total suspended solids, settleable solids, and turbidity are technology-based; effluent limits for pH, chlorine residual, total dissolved solids, chloride, and acute toxicity are water quality-based. The effluent limits are either unchanged from the previous General Order or individual permits or newly developed using site-specific data and best professional judgment. More detailed rationale is discussed below:

a. Effluent limitations for Aggregate Mining Facilities (Section IV.A, Table 1):

- (1) **Total suspended solids, settleable solids, chlorine residual and pH limits** are based on Basin Plan Table 4-2 for effluent limitations for conventional pollutants. While these limits were developed primarily for sewage treatment facilities, they also apply to other discharges. Based on Regional Water Board staff's best professional judgment, we believe these limits are technically achievable, are necessary to protect the receiving water, and are generally consistent with limits from previous individual permits for similar facilities.

The chlorine residual effluent limit only applies to those facilities that use municipal water supply as a source water and is based on Basin Plan Table 4-2.

Some receiving water is naturally high in pH. Exceedance of the pH limit will not constitute a violation of this Order if the Discharger can demonstrate, through receiving water monitoring, that the discharge does not cause a natural background pH to be depressed below 6.5 nor raised above 8.5, or if outside the range, the discharge does not cause pH to be varied from normal ambient pH by more than 0.5 Standard Units. This variation is allowed by the Basin Plan.

- (2) **Turbidity effluent limit** for aggregate mining facilities is from the previous general permit, and is based on best professional judgment.

Dischargers' monitoring data show occasional exceedances of the effluent limits for TSS, settleable matter, or turbidity. This Order contains the same effluent limits for aggregate mining facilities. It is known that toxic pollutants can attach to the solids (suspended, settleable, etc); therefore, improving solids removal will help remove potential toxic pollutants in the discharge as well. Although there have been occasional exceedances in the past, Regional Water Board staff believes the Dischargers are able to manage their settling ponds to achieve better

removal because some facilities show no violation of solids limits. This will also help discharges to stay below the toxic pollutant trigger levels contained in Provision VI.C.8.

- (3) **TDS and chloride effluent limits.** The previous permit contains TDS and chloride effluent limits for discharges to Alameda Creek above Niles. The limits are now revised to be consistent with Basin Plan and are receiving water limits (in Section V) for discharges to all fresh water bodies supporting municipal supply and ground water recharge. The purpose of effluent limits is to ensure receiving waters meet water quality objectives in the Basin Plan. The reason to change the point of compliance to the receiving water in this case is because there is evidence that the source water of several Dischargers in this area is naturally high in TDS and chlorides. This can trigger unnecessary corrective actions in response to effluent violations, which may not have any adverse impact to the receiving water. Therefore, moving the point of compliance to the receiving water, in other words, changing them to receiving water limits, avoids the unnecessary work but would still be protective of the water quality objectives. Dischargers in this area are required by this Order to monitor at least once per month upstream and downstream receiving water and effluent to demonstrate that the discharges do not cause TDS or chloride to increase in the receiving water.

b. Effluent limitations for Marine Sand Washing Facilities (Section IV.B., Table 2):

- (1) **Settable matter, pH, and chlorine residual effluent limits** are based on Basin Plan criteria in Table 4-2 for effluent limitations for conventional pollutants. While these limits were developed primarily for sewage treatment facilities, they also apply to other discharges. Based on Regional Water Board staff's best professional judgment, we believe these limits are technically achievable, are necessary to protect the receiving water, and are generally consistent with limits from previous individual permits for similar facilities.

The chlorine residual effluent limit only applies to those facilities that use municipal water supply as a source water and are based on Basin Plan Table 2-4.

Some receiving water is naturally high in pH. Exceedance of the pH limit will not constitute a violation of this Order if the Discharger can demonstrate, through receiving water monitoring, that the discharge does not cause a natural background pH to be depressed below 6.5 nor raised above 8.5, nor vary from normal ambient pH by more than 0.5 Standard Units. This variation is allowed by the Basin Plan.

- (2) **Turbidity effluent limit** was developed using the turbidity data from three Hanson marine sand washing facilities (Oakland Tide Water, San Francisco Pier 92, and Hanson Mission Valley Rock Pier 92) and is based on best

professional judgment. The turbidity effluent limit in the previous General Permit was developed using data from aggregate mining facilities only (not including any marine sand washing facilities). The monitoring data from the three marine sand washing facilities indicate that they cannot comply with that effluent limit about 9% of the time (during the period 2003- March 2007). Therefore, this Order establishes less stringent turbidity limit based on existing performance, which is allowed by Clean Water Act Section 402(o)(2)(C) and (E).

Hanson argued that there should not be a turbidity effluent limit in the General Permit for marine sand washing facilities, as various turbidimeters (nephelometers) provide inconsistent results and the color in the effluent may sometimes cause falsely high turbidity readings. Regional Water Board staff believes the new limit developed using the data from Hahson's three facilities has addressed the Discharger's concerns. Their monitoring data reflect the variability of the results. The new effluent limit was developed as the 95th percentile of all monitoring data collected during 2003-2007 (one statistical outlier was excluded from the analysis, i.e., values greater than mean + 4 standard deviation); therefore, the effluent limit addresses the variability observed in the discharges. Although the existing data show exceedances of the effluent limit based on the 95th percentile, Regional Water Board staff believes that the Dischargers will be able to manage their settling ponds to achieve better solids removal, and as a result, comply with the turbidity limit and toxic pollutant triggers.

- (3) **No TSS effluent limits for marine facilities.** Hanson Marine Operations performed a study to show that test method 160.2 for measuring TSS does not generate reliable results for salt water. The study results were submitted in a report with two addendums, all dated June 1, 2005, and one addendum dated March 24, 2006. The interference is mainly from the salt from the bay water—the filter used to capture suspended solids can retain the salt, thus the resulting TSS may be falsely higher than the actual TSS concentration in the water sample. In addition, the filter does not effectively capture the very fine suspended solids in the sand wash water, thus giving very variable results.

Based on the studies performed by Hanson Aggregates on this matter, this Order does not include TSS effluent limits. Since turbidity, under most circumstances, is positively correlated with suspended solids, a turbidity effluent limit is an appropriate substitute for TSS effluent limits.

When an improved TSS method is available, the permit may be re-opened, or the next permit may include TSS effluent limits for this category of discharges.

c. Effluent limitations for Sand Offloading Facilities (Section IV.C, Table 3):

The settleable matter effluent limit is based on the limit for these facilities specified in their current individual permits. This limit is higher than the limits for other facility categories covered under this Order (which are based on Basin plan

Table 4-2). This is to account for natural organic matter that may be entrained from the bay with the sand as opposed to solids introduced during more aggressive sand processing operations that occur at those other facility categories.

These limits are appropriately protective because they currently only apply to sand offloading facilities that discharge directly into a marsh or wetland. The marsh or wetland will remove some of the settleable solids before the discharge reaches the bay. Furthermore, during an inspection of the Hanson Aggregates Marina Vista Facility, Regional Water Board staff did not observe any sediment accumulation near the discharge outfall. Therefore, receiving water degradation is not expected to be a problem at the current solids level. However, for any new discharges from a sand offloading facility directly into an open water body, e.g., bay or slough, it may be necessary to subject these new facilities to more stringent effluent limits as those in Table 2 of the Order.

This Order requires Dischargers in this category to monitor for turbidity. For the next permit reissuance, the Regional Water Board will re-evaluate the monitoring data and treatment performance, and may impose additional and more stringent effluent limits if the Regional Water Board deems the Discharger can reasonably comply with more stringent effluent limits.

The pH effluent limits are also from Basin Plan Table 4-2 for shallow water discharges. These effluent limits are unchanged from the previous individual permit of Order No. R2-2001-0112.

d. Whole effluent acute toxicity.

This Order includes effluent limits for all aggregate mining and sand washing facilities for whole effluent acute toxicity that are unchanged from the previous Order (in Tables 1 and 2) and are based on the Basin Plan Table 4-4 for intermittent dischargers. Historical monitoring data indicate compliance with these effluent limits.

E. Antidegradation and antibacksliding Analysis

This Order includes no TSS effluent limit and a less stringent turbidity limit for marine sand washing facilities, as discussed under Section IV.B.2.b of this Fact Sheet. The less stringent turbidity limit is allowed by the antibacksliding provisions of CWA Section 402(o)(2)(C) and (E) because the Dischargers cannot comply with the previous limit under current technology. The receiving water bodies for the existing facilities of this category (Oakland harbor and Islais Creek Chanel) are not impaired by solids.

This Order also complies with Antidegradation requirements. The discharge concentrations of suspended solids are unlikely to change because the Dischargers propose no substantial changes to their treatment processes. In addition, in order to comply with the triggers for toxic pollutants, the Discharger will need to better manage their treatment facilities to achieve better solids removals, thus ensuring the discharges

stay below the trigger levels for toxic pollutants. Therefore, there is no expected lowering of receiving water quality.

F. Storm Water Limitations

The discharge of storm water that's not commingled with wastewater is covered under the State general storm water permit associated with industrial activities.

G. Land Discharge Specifications

N/A

H. Reclamation Specifications

N/A

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

1. **Receiving Water Limitations V.A.1 through V.A.3 (conditions to be avoided).** These limitations are in the previous permit and are based on the narrative/numerical objectives contained in Chapter 2 and 3 of the Basin Plan. This Order contains revised dissolved oxygen WQOs which are consistent with the Basin Plan. The DO WQOs are revised to include a more stringent WQO (7 mg/L depending on receiving water bodies) which is consistent with the Basin Plan. The TDS and chlorides limits are based on Basin Plan, Tables 3-5 and 3-7.
2. **Receiving Water Limitations V.A.4 (compliance with State Law).** This requirement is in the previous permit, and requires compliance with Federal and State law.

B. Groundwater

Not applicable.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

The principal purposes of a monitoring program by a discharger are to:

1. Document compliance with waste discharge requirements and prohibitions established by the Regional Water Board,
2. Facilitate self-policing by the discharger in the prevention and abatement of pollution arising from waste discharge,
3. Develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and

4. Prepare water and wastewater quality inventories.

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the California Water Code authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

The MRP is a standard requirement in almost all NPDES permits issued by the Regional Water Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and the Regional Water Board's policies. The MRP also contains a sampling program specific for discharges under this Order. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide data for future completion of reasonable potential analysis.

A. Influent Monitoring

Routine monitoring for influent is not established in this Order. The Discharger may monitor influent on its own initiative. The Regional Water Board Executive Officer may also require the Discharger to sample influent on a case-by-case basis.

B. Effluent Monitoring

- Monitoring requirements for flow, total dissolved solids, chloride, total suspended solids, settleable matter, pH, and chlorine residual (when applicable) are retained from the previous permit. The sampling frequency for most conventional and non-conventional pollutants has been increased from once per week to twice per week, considering the discharge volume and some exceedances in the past.
- The MRP establishes routine monitoring of toxics that have been detected in the effluent. The sampling frequency is quarterly for those that have been detected at concentrations (either in the effluent or in the receiving water) exceeding the trigger values established in this Order; this includes copper, mercury, selenium, and cyanide. For those pollutants that have been detected at concentrations close to the trigger values, the sampling frequency is quarterly for the first year, and if not triggered, twice per year thereafter. This includes arsenic, chromium VI, lead, nickel, silver, zinc, and thallium. The Dischargers discharging to a fresh water supporting municipal supply or ground water recharge are also required to monitor for two organic pollutants on a regular basis (twice per year for three years and, if not triggered, once per year thereafter): carbon tetrachloride and 1,1-dichloroethylene.

Vulcan Materials Company, Hanson Aggregates Mission Valley Rock Company, and Hanson Marine Operations Oakland Yard collected priority pollutant effluent and receiving water data during 2002-2004. Staff analyzed these effluent data to determine if there is need for additional monitoring. The data summary can be found in Appendices F-1 through F-3 of this Fact Sheet.

- The MRP includes sampling requirement for other pollutants that the Regional Water Board Executive Officer determines during the permit term, may be present in the discharge. The Executive Officer will require the Dischargers to sample for these pollutants after such a determination is made. The likely sampling frequency is twice per year for three years and, if not triggered, once per year thereafter. Monitoring for all other priority pollutants once during the permit term is also included in this Order. These data will be used to perform a reasonable potential analysis for the next permit reissuance.
- The MRP requires aggregate mining and sand washing facilities to continue to monitor for acute toxicity twice per year, which is unchanged from the previous Order.

C. Receiving Water Monitoring

1. Surface Water

The MRP retains all receiving water monitoring requirements from the previous Order. In addition, dissolved oxygen and pH monitoring is required to demonstrate compliance with Basin Plan receiving water objectives. Hardness and salinity monitoring is required to collect hardness data to calculate WQOs/WQC for the next permit reissuance. In addition, turbidity monitoring is required, since it is caused by the force of the discharge as it enters the receiving water and can only be accurately assessed by monitoring the receiving water. The data will also be used to establish ambient background condition and may be used to set turbidity effluent limits based on water quality in the future.

2. Groundwater

Not applicable.

D. Other Monitoring Requirements

Not applicable.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which, in accordance with 40 CFR 122.41 - 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in **Attachment D** of this Order.

B. Monitoring and Reporting Requirements

The Discharger will need to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are contained in the MRP (**Attachment E**), Standard Provisions of the Permit. This provision requires compliance with these documents and is based on 40 CFR 122.63. The Standard Provisions are standard requirements in almost all NPDES permits issued by the Regional Water Board, including this Order. They contain definitions of terms, specify general sampling and analytical protocols, and set out requirements for reporting spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's policies. The MRP contains a sampling program specific for the facility. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements.

C. Special Provisions

1. **Basis for Permit Reopener provision.** Provision VI.C.1 is based on 40 CFR 123 and allows future modification of this Order and its effluent limitations as necessary in response to updated WQOs that may be established in the future.
2. **Basis for Notice of Intent (NOI) Application.** Provision VI.C.2, Notice of Intent (NOI) Application, is based on 40 CFR 122.28(b).
3. **Basis for NOI Review.** Provision VI.C.3, NOI Review, is based on 40 CFR 122.28(b).
4. **Notice of General Permit Coverage—Discharge Authorization.** Provision VI.C.4, Discharge Authorization, is based on 40 CFR 122.28(b).
5. **Basis for Discharge Termination.** Provision VI.C.5, Discharge Termination, is based on 40 CFR 122.28(b).
6. **Basis for Non-Compliance as a Violation.** Provision VI.C.6, Non-Compliance as a Violation, is based on 40 CFR 122.41(a).
7. **Basis for Individual NPDES Permit may be Required.** Provision VI.C.7, Individual NPDES Permit may be Required, is based on 40 CFR 122.28(b)(3).
8. **Basis for Provision VI.C.8 (triggers).** In general, the Dischargers authorized under this Order are expected to use Best Management Practices (BMP) and enforced solids removal to reduce the potential negative impacts of pollutants in their discharges. Toxic pollutants may be present and detected in the effluent, which may be present in the source water (drinking water, bay water) or storm water, or introduced through activities that occur on the site. These pollutants include both organic and inorganic compounds. The purpose of this provision is to require Dischargers to implement additional actions if any pollutants exceed the triggers in Table 4. These triggers are not effluent limitations and should not be construed as

such. Instead, they are levels at which additional investigation is warranted to determine whether additional actions or a numeric limit for a particular pollutant is necessary.

Regional Water Board staff's best professional judgment is that the sources of priority pollutants from discharges covered by this Order are incidental and their loading is negligible when compared to loadings from municipal and industrial point-source discharges and storm water discharges. Furthermore, it is likely that these priority pollutants are associated with the solids discharged from these facilities. Compliance with the solids limits of this Order will ensure that the discharge does not contain priority pollutants at levels that potentially cause receiving water to exceed applicable water quality objectives or is harmful for the beneficial uses. Therefore, it is acceptable to initially use the trigger monitoring system for these compounds instead of designating them as effluent limits.

This provision establishes triggers for accelerated monitoring and additional pollutant control. It requires the Dischargers to investigate the toxicity and ability to treat any detected compounds in excess of Table 4 triggers. If a Discharger detects any toxic compounds and cannot address the issue through BMPs and enhanced solids removal, Regional Water Board may terminate the general permit coverage and require the discharge to be covered under an individual permit.

There are four types of triggers, based on the salinity and beneficial uses of the receiving water: fresh water bodies supporting municipal water supply or ground water recharge; other fresh water bodies; estuarine water bodies, and salt water bodies.

Basin Plan and CTR Receiving Water Salinity Policy. The Basin Plan and CTR state that the salinity characteristics (i.e., freshwater versus saltwater) of the receiving water shall be considered in determining the applicable WQOs/WQC. Freshwater criteria shall apply to discharges to waters with salinities equal to or less than 1 parts per thousands (ppt) at least 95 percent of the time. Saltwater criteria shall apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to waters with salinities in between these two categories, or tidally influenced fresh waters that support estuarine beneficial uses, the criteria shall be the lower of the salt- or freshwater criteria (the freshwater criteria for some metals are calculated based on ambient hardness) for each substance.

All triggers for metals are in total recoverable form. Type I and II triggers were calculated using a hardness value of 180 mg/L as CaCO₃ (minimum observed hardness value from Vulcan Material Company, Hanson Aggregates Mission Valley Rock Company, and Hanson Aggregate Oakland Yard sand washing facility's 13267 sampling during 2002-2004) for discharges to a fresh water environment. Type III triggers were calculated using a hardness value of 400 mg/L as CaCO₃. For Type III and Type IV triggers, translators for converting dissolved water quality objectives to total WQOs developed for Central and South San Francisco Bay for converting dissolved salt water copper (0.74 for chronic criterion, 0.88 for acute criterion) and

nickel (0.65 and 0.85) to total recoverable metals were used in the calculation. For the next permit reissuance, Regional Water Board staff will revisit the trigger values when additional information is available.

Regional Water Board staff will determine the receiving water types for the existing and potential discharges based on their discharge locations and available monitoring data. This will be indicated in the discharge authorization document.

9. Basis for Construction, Operation, and Maintenance Specifications

- a. **Wastewater Facilities, Review and Evaluation, Status Reports.** This provision is based on the Basin Plan.
- b. **Operations and Maintenance Manual, Review and Status Reports.** This provision is based on the Basin Plan and the requirements of 40 CFR §122.

10. Basis for Special Studies and Additional Monitoring Requirements

- a. **Best Management Practices Plan.** Provision VI.C.10.b requires all Dischargers seeking coverage under this General Permit to develop, update annually, and implement a BMPs plan for their industrial activity. The purpose of the BMPs plan is to control and abate the discharge of pollutants from the facility to surface waters and to achieve compliance with Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) requirements and with applicable water quality standards. This provision is unchanged from the previous Order.
- b. **Facility Modification/Maintenance.** Provision VI.C.10.c requires each Discharger to inform the Regional Water Board about modifications made to its facility that will affect effluent quality. The provision also requires the discharger to inform the Board if the outfall is relocated or eliminated so that the Board can make any necessary modification to its permit coverage. This Provision is based on 40 CFR 122.41(I)(1).

VIII. PUBLIC PARTICIPATION

The San Francisco Bay Regional Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) General permit for aggregate mining, sand washing, and sand offloading facilities. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and

recommendations. Notification was provided through the Valley Times and on the Recorder for one day in September 2007.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order, Attention Tong Yin.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on October 15, 2007.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: November 14, 2007
Time: 9:00 a.m.
Location: Elihu Harris State Office Building
1515 Clay Street
Oakland, CA
1st floor Auditorium
Contact: Tong Yin, Phone: (510)622-2418; email: TYin@waterboards.ca.gov

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is www.waterboards.ca.gov/sanfranciscobay where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (510) 622-2300.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Tong Yin at (510) 622-2418, or by e-mail at TYin@waterboards.ca.gov.

IX. APPENDICES

- Appendix F-1.** Observed Maximum Effluent and Receiving Water Monitoring Concentrations from Hanson Mission Rock Company
- Appendix F-2.** Observed Maximum Effluent and Receiving Water Monitoring Concentrations from Hanson Oakland Sand Yard
- Appendix F-3.** Observed Maximum Effluent and Receiving Water Monitoring Concentrations from Vulcan Materials Company

Appendix F-1
Hanson Mission Rock Company -
Observed Maxium Priority Pollutant Concentrations

CTR No.	Constituent name	EFFLUENT DATA				BACKGROUND DATA (B)			
		Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant effluent detected max conc (ug/L)	B Available (Y/N)?	Are all B non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the Detected Maximum Background Conc
1	Antimony	Y	N		0.2	Y	Y	0.12	
2	Arsenic	Y	N		9.8	Y	N		1.1
3	Beryllium	Y	Y	0.1		Y	Y	0.1	
4	Cadmium	Y	N		0.08	Y	N		0.04
5a	Chromium (III)	Y	N		8	Y	N		4.5
5b	Chromium (VI)	Y	N		5	Y	N		3
6	Copper	Y	N		17.3	Y	N		2.6
7	Lead	Y	N		1.1	Y	N		0.36
8	Mercury (303d listed)	Y	N		0.017	Y	N		3.39E-02
9	Nickel	Y	N		11	Y	N		6
10	Selenium (303d listed)	Y	N		1.3	Y	N		0.6
11	Silver	Y	N		0.29	Y	Y	0.08	
12	Thallium	Y	N		0.02	Y	N		0.01
13	Zinc	Y	N		11	Y	N		154
14	Cyanide	Y	N		6	Y	N		9
15	Asbestos	N				N			
16	2,3,7,8-TCDD (Dioxin) (303d lis	Y	Y	3.30E-06		Y	Y	1.00E-06	
16-TEQ	2,3,7,8-TCDD TEQ (303d listed	Y	N		0	Y	N		0.00E+00
17	Acrolein	Y	Y	2		Y	Y	2	
18	Acrylonitrile	Y	Y	2		Y	Y	2	
19	Benzene	Y	N		0.2	Y	Y	0.2	
20	Bromoform	Y	Y	0.1		Y	Y	0.1	
21	Carbon Tetrachloride	Y	N		0.3	Y	Y	0.5	
22	Chlorobenzene	Y	Y	0.1		Y	Y	0.1	
23	Chlorodibromomethane	Y	Y	0.1		Y	Y	0.1	
24	Chloroethane	Y	Y	0.1		Y	Y	0.1	
25	2-Chloroethylvinyl ether	N				Y	Y	0.3	
26	Chloroform	Y	N		5.5	Y	N		4
27	Dichlorobromomethane	Y	Y	0.1		Y	Y	0.1	
28	1,1-Dichloroethane	Y	N		0.3	Y	Y	0.1	
29	1,2-Dichloroethane	Y	Y	0.1		Y	Y	0.2	
30	1,1-Dichloroethylene	Y	N		0.4	Y	Y	0.2	
31	1,2-Dichloropropane	Y	N		0.2	Y	Y	0.1	
32	1,3-Dichloropropylene	N				Y	Y	0.2	
33	Ethylbenzene	Y	Y	0.2		Y	Y	0.1	
34	Methyl Bromide	Y	N		0.8	Y	Y	0.1	
35	Methyl Chloride	Y	N		0.3	Y	Y	0.1	
36	Methylene Chloride	Y	Y	0.7		Y	Y	0.2	
37	1,1,2,2-Tetrachloroethane	Y	Y	0.1		Y	Y	0.2	
38	Tetrachloroethylene	Y	Y	0.3		Y	Y	0.1	
39	Toluene	Y	N		0.2	Y	Y	0.2	
40	1,2-Trans-Dichloroethylene	Y	N		0.4	Y	Y	0.2	
41	1,1,1-Trichloroethane	Y	Y	0.4		Y	Y	0.5	
42	1,1,2-Trichloroethane	Y	Y	0.1		Y	Y	0.2	
43	Trichloroethylene	Y	N		0.2	Y	Y	0.2	
44	Vinyl Chloride	Y	N		0.4	Y	Y	0.1	
45	2-Chlorophenol	Y	Y	0.5		Y	Y	0.8	
46	2,4-Dichlorophenol	Y	Y	1		Y	Y	0.6	
47	2,4-Dimethylphenol	Y	Y	1		Y	Y	1	
48	2-Methyl- 4,6-Dinitrophenol	Y	Y	1		Y	Y	1	
49	2,4-Dinitrophenol	Y	Y	1		Y	Y	2	
50	2-Nitrophenol	Y	Y	1		Y	Y	1	
51	4-Nitrophenol	Y	Y	1		Y	Y	2	
52	3-Methyl 4-Chlorophenol	Y	Y	0.5		Y	Y	0.5	
53	Pentachlorophenol	Y	Y	0.5		Y	Y	0.2	
54	Phenol	Y	Y	0.5		Y	Y	0.5	
55	2,4,6-Trichlorophenol	Y	Y	1		Y	Y	1	
56	Acenaphthene	Y	Y	0.17		Y	Y	0.17	
57	Acenaphthylene	Y	Y	0.03		Y	Y	0.03	
58	Anthracene	Y	Y	0.16		Y	Y	0.16	
59	Benzidine	Y	Y	1		Y	Y	1	
60	Benzo(a)Anthracene	Y	Y	0.12		Y	Y	0.12	
61	Benzo(a)Pyrene	Y	Y	0.09		Y	Y	0.09	
62	Benzo(b)Fluoranthene	Y	Y	0.11		Y	Y	0.11	
63	Benzo(ghi)Perylene	Y	Y	0.06		Y	Y	0.06	

Appendix F-1
Hanson Mission Rock Company -
Observed Maxium Priority Pollutant Concentrations

CTR No.	Constituent name	EFFLUENT DATA				BACKGROUND DATA (B)			
		Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant effluent detected max conc (ug/L)	B Available (Y/N)?	Are all B non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the Detected Maximum Background Conc
64	Benzo(k)Fluoranthene	Y	Y	0.16		Y	Y	0.16	
65	Bis(2-Chloroethoxy)Methane	Y	Y	1		Y	Y	1	
66	Bis(2-Chloroethyl)Ether	Y	Y	0.5		Y	Y	0.5	
67	Bis(2-Chloroisopropyl)Ether	Y	Y	1		Y	Y	0.5	
68	Bis(2-Ethylhexyl)Phthalate	Y	N		3	Y	Y	2	
69	4-Bromophenyl Phenyl Ether	Y	Y	1		Y	Y	1	
70	Butylbenzyl Phthalate	Y	Y	1		Y	Y	1	
71	2-Chloronaphthalene	Y	Y	1		Y	Y	1	
72	4-Chlorophenyl Phenyl Ether	Y	Y	1		Y	Y	1	
73	Chrysene	Y	Y	0.14		Y	Y	0.14	
74	Dibenzo(a,h)Anthracene	Y	Y	0.04		Y	Y	0.04	
75	1,2-Dichlorobenzene	Y	Y	0.1		Y	Y	0.1	
76	1,3-Dichlorobenzene	Y	Y	0.1		Y	Y	0.1	
77	1,4-Dichlorobenzene	Y	Y	0.1		Y	Y	0.2	
78	3,3 Dichlorobenzidine	Y	Y	1		Y	Y	1	
79	Diethyl Phthalate	Y	Y	1		Y	Y	1	
80	Dimethyl Phthalate	Y	Y	1		Y	Y	1	
81	Di-n-Butyl Phthalate	Y	Y	1		Y	Y	1	
82	2,4-Dinitrotoluene	Y	Y	1		Y	Y	1	
83	2,6-Dinitrotoluene	Y	Y	1		Y	Y	1	
84	Di-n-Octyl Phthalate	Y	Y	1		Y	Y	1	
85	1,2-Diphenylhydrazine	Y	Y	0.5		Y	Y	0.5	
86	Fluoranthene	Y	Y	0.04		Y	Y	0.03	
87	Fluorene	Y	Y	0.03		Y	Y	0.02	
88	Hexachlorobenzene	Y	Y	0.5		Y	Y	0.5	
89	Hexachlorobutadiene	Y	Y	0.5		Y	Y	0.5	
90	Hexachlorocyclopentadiene	Y	Y	1		Y	Y	1	
91	Hexachloroethane	Y	Y	0.5		Y	Y	0.5	
92	Indeno(1,2,3-cd)Pyrene	Y	Y	0.04		Y	Y	0.04	
93	Isophorone	Y	Y	0.5		Y	Y	0.5	
94	Naphthalene	Y	Y	0.05		Y	Y	0.05	
95	Nitrobenzene	Y	Y	0.5		Y	Y	0.5	
96	N-Nitrosodimethylamine	Y	Y	1		Y	Y	0.5	
97	N-Nitrosodi-n-Propylamine	Y	Y	1		Y	Y	0.5	
98	N-Nitrosodiphenylamine	Y	Y	1		Y	Y	0.5	
99	Phenanthrene	Y	Y	0.03		Y	Y	0.03	
100	Pyrene	Y	Y	0.03		Y	Y	0.03	
101	1,2,4-Trichlorobenzene	Y	Y	0.8		Y	Y	0.2	
102	Aldrin	Y	Y	0.002		Y	Y	0.002	
103	alpha-BHC	Y	Y	0.005		Y	N		0.03
104	beta-BHC	Y	Y	0.002		Y	Y	0.002	
105	gamma-BHC	Y	Y	0.005		Y	N		0.02
106	delta-BHC	Y	Y	0.002		Y	N		0.024
107	Chlordane (303d listed)	Y	Y	0.01		Y	Y	0.01	
108	4,4'-DDT (303d listed)	Y	Y	0.01		Y	Y	0.005	
109	4,4'-DDE	Y	Y	0.01		Y	N		0.02
110	4,4'-DDD	Y	Y	0.02		Y	Y	0.01	
111	Dieldrin (303d listed)	Y	Y	0.005		Y	N		0.009
112	alpha-Endosulfan	Y	Y	0.005		Y	Y	0.005	
113	beta-Endosulfan	Y	Y	0.005		Y	N		0.01
114	Endosulfan Sulfate	Y	Y	0.01		Y	Y	0.01	
115	Endrin	Y	Y	0.005		Y	N		0.01
116	Endrin Aldehyde	Y	Y	0.005		Y	Y	0.005	
117	Heptachlor	Y	Y	0.005		Y	Y	0.005	
118	Heptachlor Epoxide	Y	Y	0.005		Y	N		0.006
119-125	PCBs sum (303d listed)	Y	Y	0.005		Y	Y	0.1	
126	Toxaphene	Y	Y	0.1		Y	Y	0.1	
	Tributyltin	N				N			
	Total PAHs	Y	N		0	Y	N		0

Appendix F-2

Hanson Aggregate Oakland Sand Yard - Observed Maximum Priority Pollutant Concentrations

CTR No.	Constituent name	EFFLUENT DATA				BACKGROUND DATA (B)			
		Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant effluent detected max conc (ug/L)	B Available (Y/N)?	Are all B non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the Detected Maximum Background Conc
1	Antimony	Y	N		1.2	Y	Y	1	
2	Arsenic	Y	N		10	Y	N		8
3	Beryllium	Y	Y	1		Y	Y	1	
4	Cadmium	Y	Y	1		Y	Y	1	
5a	Chromium (III)	Y	Y	1		Y	N		1.7
5b	Chromium (VI)	Y	Y	1		Y	Y	10	
6	Copper	Y	N		14	Y	N		13
7	Lead	Y	N		2.1	Y	N		2.5
8	Mercury (303d listed)	Y	N		0.014	Y	N		0.053
9	Nickel	Y	N		12	Y	N		7.5
10	Selenium (303d listed)	Y	N		28	Y	N		7.8
11	Silver	Y	N		1	Y	N		1.5
12	Thallium	Y	N		4.9	Y	N		3.9
13	Zinc	Y	Y	10		Y	Y	1	
14	Cyanide	Y	Y	5		Y	N		20
15	Asbestos	N				N			
16	2,3,7,8-TCDD (Dioxin) (303d listed)	Y	Y	1.42E-06		Y	Y	1.42E-06	
16-TEQ	2,3,7,8-TCDD TEQ (303d listed)	Y	N		6.33E-09	Y	N		4.55E-08
17	Acrolein	Y	Y	7.3		Y	Y	7.3	
18	Acrylonitrile	Y	Y	5.8		Y	Y	5.8	
19	Benzene	Y	Y	0.15		Y	Y	0.15	
20	Bromoform	Y	Y	0.33		Y	Y	0.33	
21	Carbon Tetrachloride	Y	Y	0.48		Y	Y	0.48	
22	Chlorobenzene	Y	Y	0.13		Y	Y	0.13	
23	Chlorodibromomethane	Y	Y	0.36		Y	Y	0.36	
24	Chloroethane	Y	Y	0.29		Y	Y	0.29	
25	2-Chloroethylvinyl ether	Y	Y	0.5		Y	Y	0.5	
26	Chloroform	Y	Y	0.16		Y	Y	0.16	
27	Dichlorobromomethane	Y	Y	0.23		Y	Y	0.23	
28	1,1-Dichloroethane	Y	Y	0.28		Y	Y	0.28	
29	1,2-Dichloroethane	Y	Y	0.18		Y	Y	0.18	
30	1,1-Dichloroethylene	Y	Y	0.3		Y	Y	0.3	
31	1,2-Dichloropropane	Y	Y	0.16		Y	Y	0.16	
32	1,3-Dichloropropylene	Y	Y	0.34		Y	Y	0.34	
33	Ethylbenzene	Y	Y	0.2		Y	Y	0.2	
34	Methyl Bromide	Y	Y	0.4		Y	Y	0.4	
35	Methyl Chloride	Y	Y	0.34		Y	Y	0.34	
36	Methylene Chloride	Y	Y	0.5		Y	N		1.4
37	1,1,2,2-Tetrachloroethane	Y	Y	0.16		Y	Y	0.16	
38	Tetrachloroethylene	Y	Y	0.15		Y	Y	0.15	
39	Toluene	Y	Y	0.4		Y	Y	0.4	
40	1,2-Trans-Dichloroethylene	Y	Y	0.2		Y	Y	0.2	
41	1,1,1-Trichloroethane	Y	Y	0.28		Y	Y	0.28	
42	1,1,2-Trichloroethane	Y	Y	0.24		Y	Y	0.24	
43	Trichloroethylene	Y	Y	0.3		Y	Y	0.3	
44	Vinyl Chloride	Y	Y	0.32		Y	Y	0.32	
45	2-Chlorophenol	Y	Y	0.8		Y	Y	0.8	
46	2,4-Dichlorophenol	Y	Y	0.6		Y	Y	0.6	
47	2,4-Dimethylphenol	Y	Y	1		Y	Y	1	
48	2-Methyl- 4,6-Dinitrophenol	Y	Y	1		Y	Y	1	
49	2,4-Dinitrophenol	Y	Y	2		Y	Y	2	
50	2-Nitrophenol	Y	Y	1		Y	Y	1	
51	4-Nitrophenol	Y	Y	2		Y	Y	2	
52	3-Methyl 4-Chlorophenol	Y	Y	0.5		Y	Y	0.5	
53	Pentachlorophenol	Y	Y	0.2		Y	Y	0.2	
54	Phenol	Y	Y	0.5		Y	Y	0.5	
55	2,4,6-Trichlorophenol	Y	Y	1		Y	Y	1	
56	Acenaphthene	Y	Y	0.5		Y	Y	0.5	
57	Acenaphthylene	Y	Y	1		Y	Y	1	
58	Anthracene	Y	Y	0.05		Y	Y	0.05	
59	Benzidine	Y	Y	1		Y	Y	1	
60	Benzo(a)Anthracene	Y	Y	0.05		Y	Y	0.05	
61	Benzo(a)Pyrene	Y	Y	0.05		Y	Y	0.05	
62	Benzo(b)Fluoranthene	Y	Y	0.05		Y	Y	0.05	

Appendix F-2
Hanson Aggregate Oakland Sand Yard -
Observed Maximum Priority Pollutant Concentrations

CTR No.	Constituent name	EFFLUENT DATA				BACKGROUND DATA (B)			
		Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant effluent detected max conc (ug/L)	B Available (Y/N)?	Are all B non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the Detected Maximum Background Conc
63	Benzo(ghi)Perylene	Y	Y	0.1		Y	Y	0.1	
64	Benzo(k)Fluoranthene	Y	Y	0.05		Y	Y	0.05	
65	Bis(2-Chloroethoxy)Methane	Y	Y	1		Y	Y	1	
66	Bis(2-Chloroethyl)Ether	Y	Y	0.5		Y	Y	0.5	
67	Bis(2-Chloroisopropyl)Ether	Y	Y	0.5		Y	Y	0.5	
68	Bis(2-Ethylhexyl)Phthalate	Y	N		2	Y	N		2
69	4-Bromophenyl Phenyl Ether	Y	Y	1		Y	Y	1	
70	Butylbenzyl Phthalate	Y	Y	1		Y	Y	1	
71	2-Chloronaphthalene	Y	Y	1		Y	Y	1	
72	4-Chlorophenyl Phenyl Ether	Y	Y	1		Y	Y	1	
73	Chrysene	Y	Y	0.05		Y	Y	0.05	
74	Dibenzo(a,h)Anthracene	Y	Y	0.09		Y	Y	0.09	
75	1,2-Dichlorobenzene	Y	Y	0.21		Y	Y	0.21	
76	1,3-Dichlorobenzene	Y	Y	0.27		Y	Y	0.27	
77	1,4-Dichlorobenzene	Y	Y	0.2		Y	Y	0.2	
78	3,3 Dichlorobenzidine	Y	Y	1		Y	Y	1	
79	Diethyl Phthalate	Y	N		1	Y	N		1
80	Dimethyl Phthalate	Y	Y	1		Y	Y	1	
81	Di-n-Butyl Phthalate	Y	N		3	Y	N		3
82	2,4-Dinitrotoluene	Y	Y	1		Y	Y	1	
83	2,6-Dinitrotoluene	Y	Y	1		Y	Y	1	
84	Di-n-Octyl Phthalate	Y	N		9	Y	N		9
85	1,2-Diphenylhydrazine	Y	Y	0.5		Y	Y	0.5	
86	Fluoranthene	Y	Y	0.05		Y	Y	0.05	
87	Fluorene	Y	Y	0.1		Y	Y	0.1	
88	Hexachlorobenzene	Y	Y	0.5		Y	Y	0.5	
89	Hexachlorobutadiene	Y	Y	0.5		Y	Y	0.5	
90	Hexachlorocyclopentadiene	Y	Y	1		Y	Y	1	
91	Hexachloroethane	Y	Y	0.5		Y	Y	0.5	
92	Indeno(1,2,3-cd)Pyrene	Y	Y	0.05		Y	Y	0.05	
93	Isophorone	Y	Y	0.5		Y	Y	0.5	
94	Naphthalene	Y	Y	0.5		Y	Y	0.5	
95	Nitrobenzene	Y	Y	0.5		Y	Y	0.5	
96	N-Nitrosodimethylamine	Y	Y	0.5		Y	Y	0.5	
97	N-Nitrosodi-n-Propylamine	Y	Y	1		Y	Y	1	
98	N-Nitrosodiphenylamine	Y	Y	0.5		Y	Y	0.5	
99	Phenanthrene	Y	Y	0.05		Y	Y	0.05	
100	Pyrene	Y	Y	0.05		Y	Y	0.05	
101	1,2,4-Trichlorobenzene	Y	Y	0.33		Y	Y	0.33	
102	Aldrin	Y	Y	0.005		Y	Y	0.005	
103	alpha-BHC	Y	Y	0.005		Y	Y	0.005	
104	beta-BHC	Y	Y	0.002		Y	Y	0.002	
105	gamma-BHC	Y	Y	0.005		Y	Y	0.005	
106	delta-BHC	Y	Y	0.002		Y	Y	0.002	
107	Chlordane (303d listed)	Y	Y	0.01		Y	Y	0.01	
108	4,4'-DDT (303d listed)	Y	Y	0.01		Y	Y	0.01	
109	4,4'-DDE	Y	Y	0.05		Y	Y	0.05	
110	4,4'-DDD	Y	Y	0.05		Y	Y	0.05	
111	Dieldrin (303d listed)	Y	Y	0.01		Y	Y	0.01	
112	alpha-Endosulfan	Y	Y	0.005		Y	Y	0.005	
113	beta-Endosulfan	Y	Y	0.005		Y	Y	0.005	
114	Endosulfan Sulfate	Y	Y	0.01		Y	Y	0.01	
115	Endrin	Y	Y	0.005		Y	Y	0.005	
116	Endrin Aldehyde	Y	Y	0.005		Y	Y	0.005	
117	Heptachlor	Y	Y	0.005		Y	Y	0.005	
118	Heptachlor Epoxide	Y	Y	0.005		Y	Y	0.005	
119-125	PCBs sum (303d listed)	Y	Y	0.1		Y	Y	0.1	
126	Toxaphene	Y	Y	0.1		Y	Y	0.1	
	Tributyltin	N				N			
	Total PAHs	Y	N		0	N			

Appendix F-3
Vulcan Materials Company -
Observed Maximum Toxic Pollutant Concentrations

CTR No.	Constituent name	EFFLUENT DATA				BACKGROUND DATA (B)			
		Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant effluent detected max conc (ug/L)	B Available (Y/N)?	Are all B non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the Detected Maximum Background Conc
1	Antimony	Y	Y	3		Y	Y	3	
2	Arsenic	Y	N		2.35	Y	Y	1	
3	Beryllium	Y	Y	0.5		Y	Y	0.5	
4	Cadmium	Y	Y	0.5		Y	Y	0.5	
5a	Chromium (III)	Y	N		7.14	Y	N		6.2
5b	Chromium (VI)	Y	Y	10		Y	Y	10	
6	Copper	Y	N		1.18	Y	N		2.37
7	Lead	Y	Y	0.5		Y	Y	0.500	
8	Mercury (303d listed)	Y	Y	0.2		Y	Y	0.2	
9	Nickel	Y	N		1.94	Y	N		2.18
10	Selenium (303d listed)	Y	Y	3		Y	Y	3	
11	Silver	Y	Y	0.5		Y	Y	0.5	
12	Thallium	Y	Y	0.5		Y	Y	0.5	
13	Zinc	Y	N		4.11	Y	N		5.19
14	Cyanide	Y	Y	10		Y	Y	10	
15	Asbestos	N				N			
16	2,3,7,8-TCDD (Dioxin) (303d lis	Y	Y	1.30E-06		Y	Y	1.30E-06	
16-TEQ	2,3,7,8-TCDD TEQ (303d listed	Y	N		0	Y	N		0
17	Acrolein	Y	Y	5		Y	Y	5	
18	Acrylonitrile	Y	Y	2.5		Y	Y	2.5	
19	Benzene	Y	Y	0.5		Y	Y	0.5	
20	Bromoform	Y	Y	0.5		Y	Y	0.5	
21	Carbon Tetrachloride	Y	Y	0.5		Y	Y	0.5	
22	Chlorobenzene	Y	Y	0.5		Y	Y	0.5	
23	Chlorodibromomethane	Y	Y	0.5		Y	Y	0.5	
24	Chloroethane	Y	Y	0.5		Y	Y	0.5	
25	2-Chloroethylvinyl ether	Y	Y	5		Y	Y	5	
26	Chloroform	Y	Y	0.5		Y	Y	0.5	
27	Dichlorobromomethane	Y	Y	0.5		Y	Y	0.5	
28	1,1-Dichloroethane	Y	Y	0.5		Y	Y	0.5	
29	1,2-Dichloroethane	Y	Y	0.5		Y	Y	0.5	
30	1,1-Dichloroethylene	Y	Y	0.5		Y	Y	0.5	
31	1,2-Dichloropropane	Y	Y	0.5		Y	Y	0.5	
32	1,3-Dichloropropylene	Y	Y	0.5		Y	Y	0.5	
33	Ethylbenzene	Y	Y	0.5		Y	Y	0.5	
34	Methyl Bromide	N				N			
35	Methyl Chloride	Y	Y	0.5		Y	Y	0.5	
36	Methylene Chloride	Y	Y	0.5		Y	Y	0.5	
37	1,1,2,2-Tetrachloroethane	Y	Y	0.5		Y	Y	0.5	
38	Tetrachloroethylene	Y	Y	0.5		Y	Y	0.5	
39	Toluene	Y	Y	0.5		Y	Y	0.5	
40	1,2-Trans-Dichloroethylene	Y	Y	0.5		Y	Y	0.5	
41	1,1,1-Trichloroethane	Y	Y	0.5		Y	Y	0.5	
42	1,1,2-Trichloroethane	Y	Y	0.5		Y	Y	0.5	
43	Trichloroethylene	Y	Y	0.5		Y	Y	0.5	
44	Vinyl Chloride	Y	Y	0.5		Y	Y	0.5	
45	2-Chlorophenol	Y	Y	2		Y	Y	2	
46	2,4-Dichlorophenol	Y	Y	1		Y	Y	1	
47	2,4-Dimethylphenol	Y	Y	1		Y	Y	1	
48	2-Methyl- 4,6-Dinitrophenol	Y	Y	10		Y	Y	10	
49	2,4-Dinitrophenol	Y	Y	5		Y	Y	5	
50	2-Nitrophenol	Y	Y	10		Y	Y	10	
51	4-Nitrophenol	Y	Y	10		Y	Y	10	
52	3-Methyl 4-Chlorophenol	Y	Y	5		Y	Y	5	
53	Pentachlorophenol	Y	Y	5		Y	Y	5	
54	Phenol	Y	Y	1		Y	Y	1	
55	2,4,6-Trichlorophenol	Y	Y	2		Y	Y	2	
56	Acenaphthene	Y	Y	0.1		Y	Y	0.1	
57	Acenaphthylene	Y	Y	0.1		Y	Y	0.1	
58	Anthracene	Y	Y	0.05		Y	Y	0.05	
59	Benzidine	Y	Y	5		Y	Y	5	
60	Benzo(a)Anthracene	Y	Y	0.1		Y	Y	0.1	
61	Benzo(a)Pyrene	Y	Y	0.1		Y	Y	0.1	
62	Benzo(b)Fluoranthene	Y	Y	0.1		Y	Y	0.1	
63	Benzo(ghi)Perylene	Y	Y	0.1		Y	Y	0.1	

Appendix F-3
Vulcan Materials Company -
Observed Maximum Toxic Pollutant Concentrations

CTR No.	Constituent name	EFFLUENT DATA				BACKGROUND DATA (B)			
		Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant effluent detected max conc (ug/L)	B Available (Y/N)?	Are all B non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the Detected Maximum Background Conc
64	Benzo(k)Fluoranthene	Y	Y	0.05		Y	Y	0.05	
65	Bis(2-Chloroethoxy)Methane	Y	Y	5		Y	Y	5	
66	Bis(2-Chloroethyl)Ether	Y	Y	1		Y	Y	1	
67	Bis(2-Chloroisopropyl)Ether	Y	Y	2		Y	Y	2	
68	Bis(2-Ethylhexyl)Phthalate	Y	Y	5		Y	Y	5	
69	4-Bromophenyl Phenyl Ether	Y	Y	5		Y	Y	5	
70	Butylbenzyl Phthalate	Y	Y	5		Y	Y	5	
71	2-Chloronaphthalene	Y	Y	2		Y	Y	2	
72	4-Chlorophenyl Phenyl Ether	Y	Y	2		Y	Y	2	
73	Chrysene	Y	Y	0.1		Y	Y	0.1	
74	Dibenzo(a,h)Anthracene	Y	Y	0.1		Y	Y	0.1	
75	1,2-Dichlorobenzene	Y	Y	0.5		Y	Y	0.5	
76	1,3-Dichlorobenzene	Y	Y	0.5		Y	Y	0.5	
77	1,4-Dichlorobenzene	Y	Y	0.5		Y	Y	0.5	
78	3,3 Dichlorobenzidine	Y	Y	5		Y	Y	5	
79	Diethyl Phthalate	Y	Y	5		Y	Y	5	
80	Dimethyl Phthalate	Y	Y	5		Y	Y	5	
81	Di-n-Butyl Phthalate	Y	Y	5		Y	Y	5	
82	2,4-Dinitrotoluene	Y	Y	2		Y	Y	2	
83	2,6-Dinitrotoluene	Y	Y	5		Y	Y	5	
84	Di-n-Octyl Phthalate	Y	Y	5		Y	Y	5	
85	1,2-Diphenylhydrazine	N				N			
86	Fluoranthene	Y	Y	0.15		Y	Y	0.15	
87	Fluorene	Y	Y	0.1		Y	Y	0.1	
88	Hexachlorobenzene	Y	Y	2		Y	Y	2	
89	Hexachlorobutadiene	Y	Y	2		Y	Y	2	
90	Hexachlorocyclopentadiene	Y	Y	5		Y	Y	5	
91	Hexachloroethane	Y	Y	2		Y	Y	2	
92	Indeno(1,2,3-cd)Pyrene	Y	Y	0.1		Y	Y	0.1	
93	Isophorone	Y	Y	2		Y	Y	2	
94	Naphthalene	Y	Y	0.15		Y	Y	0.15	
95	Nitrobenzene	Y	Y	2		Y	Y	2	
96	N-Nitrosodimethylamine	Y	Y	5		Y	Y	5	
97	N-Nitrosodi-n-Propylamine	Y	Y	2		Y	Y	2	
98	N-Nitrosodiphenylamine	Y	Y	1		Y	Y	1	
99	Phenanthrene	Y	Y	0.1		Y	Y	0.1	
100	Pyrene	Y	Y	0.15		Y	Y	0.15	
101	1,2,4-Trichlorobenzene	Y	Y	1		Y	Y	1	
102	Aldrin	Y	Y	0.005		Y	Y	0.005	
103	alpha-BHC	Y	Y	0.01		Y	Y	0.01	
104	beta-BHC	Y	Y	0.005		Y	Y	0.005	
105	gamma-BHC	Y	Y	0.02		Y	Y	0.02	
106	delta-BHC	Y	Y	0.005		Y	Y	0.005	
107	Chlordane (303d listed)	Y	Y	0.1		Y	Y	0.1	
108	4,4'-DDT (303d listed)	Y	Y	0.01		Y	Y	0.01	
109	4,4'-DDE	Y	Y	0.05		Y	Y	0.05	
110	4,4'-DDD	Y	Y	0.05		Y	Y	0.05	
111	Dieldrin (303d listed)	Y	Y	0.01		Y	Y	0.01	
112	alpha-Endosulfan	Y	Y	0.02		Y	Y	0.02	
113	beta-Endosulfan	Y	Y	0.01		Y	Y	0.01	
114	Endosulfan Sulfate	Y	Y	0.05		Y	Y	0.05	
115	Endrin	Y	Y	0.01		Y	Y	0.01	
116	Endrin Aldehyde	Y	Y	0.01		Y	Y	0.01	
117	Heptachlor	Y	Y	0.01		Y	Y	0.01	
118	Heptachlor Epoxide	Y	Y	0.01		Y	Y	0.01	
119-125	PCBs sum (303d listed)	Y	Y	0.5		Y	Y	0.5	
126	Toxaphene	Y	Y	0.05		Y	Y	0.05	
	Tributyltin	N				N			

Notes:

- 1) Estimated (J qualified) values were not used to determine maximum detected values for each analyte.
- 2) Background data from monitoring location BD40 and BD50.